269247

KAB01--05---
PROGRAM SUCCESSFULLY CORRECTED

DATE: 22/11/65 TIME: 18.02.

```
ST11104; TL 1000;START1600;
V   50;
YA     ; YB    31; YC     ;
YD     ; YE     ; YF    23;
YG     ; YH     ; YJ     ;
       YK; YL63; YM;
YN     ; YP     ; YQ     ;
YR     ; YS    31; YT     ;
       YU31; YV63; YW63;
YX   63; YY    63; YZ  511;
       RESTART; J6; J6;
PROGRAM;

       V0=B0542306113032061;
       V1=B4751723647517236;
       V2=QAYX0/AYX31/B121003;
       V3=QAYX32/AYX63/B121021;
       V4=QAYY0/AYY31/0;
       V5=QAYY32/AYY63/0;
       V6=Q1/1/AYF1;
       V7=Q8/4/18;
       V18=B0120501360350410;
       V19=Q31/1/AYB0;
       V20=QAYZ0/AYZ255/0;
       V21=QAYZ256/AYZ511/0;
       SETB377; ZERO; NOT; SET20; =RC15; JS3P8;
8;       SET97; =RI3;       SET1; =RM4;
       SETAZ50; DUP; =Q5;
       SETAY0; DUP; =Q1; -;
       =RC2; I2=-1; COTOQ6; QOTOQ13;
       ZERO; =RM14; ZERO; =VOP7;
       V3; V2; JSE70; (CHANNEL 3);
       J6;
       ERASE; V2; V3; JSE70; (MONITOR);
       J6;
       V21; V20; JS1P7; ZERO; JSP7;
       SET6; =C3; JS4P754; (OPEN CH. 7);
       SETB106; JSE70; (CH. 6 OPEN ETC.);
       J3;
       SHL+9; J173*GEZ;
       SET2; =C3;
173;       Z35; J169*LTZ;
       (UNDER POST CONTROL);
       SET9; OUT; SHA-24; SHL+24; SET3;
       OUT; SHA-24; SHLD+24; =Z34; ERASE;
       V29=QAYU0/AYU30/B120002;
       V29; JSE70; (OPEN READ PPT);
       J3;
       SETB60002; JSE70; (CLOSE PPT);
       J3;
       =Q15; MOM15; SHL-42; SETB75; NEV;
       JP100=Z; (INITIAL EM);
       YU0; ZERO; SHLD+24;
       SETB0702; SHL+12; NEV;
       SETB6402; NEV; J244*NEZ;(IF NOT CN CRLF T CRLF);
       SET4; =RC15; DUP; SHL-24; =Y1; ZERO; NOT;
237;       REV;
238;       ZERO; SHLD+6; DUP; SETB20; =; J244*LTZ;
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        SETB34; J244=; SETB36; NEV; DUP; J236=Z; NOT;
236;        CAB; SHLD+6; REV; ERASE; DC15; J237C15NZ;
        =YU30M15; M15; J239*NEZ;
        M+I15; SET8; =C15; YU1; DUP; =Y2; J238;
239;        C3; SET2; NEV; J172=Z;
        V29; SETB77404; NEV; JSE70; (FIND TEXT);
        J174;
        V5; V4; JS6P1; (OPEN CH.6-PRINT TITLE-IDENT TO Z44-45);
        J4;
        JS7P1; (CLOSE CH.6);
        J4;
        Z45; SHL+30; SHL-42; SET33; =;
        Z38; SET1; SHL+38; CAB; DUP; J243=Z;(IF ALGOL);
        SET20; -; J244*NEZ;(IF NOT U);
        NOT; REV; DUP; SHL+12; J244*GEZ;(IF U/C COMP. PERMIT BIT
        NOT SET); AND; =Z38;(REMOVE KIDSGROVE MARKER);
        JS3P754; (CLOSE CH.7);
        SETB3024; (USERCODE COMPILER);
171;        JS4P7; (CLOSE CH.5);
        SETB130141; SHC+1; JSE70; (CLOSE CH.3);
        J3;
        J7; (FETCH BRICK);
170;        SETB130743; SHC+1; JSE70; (CLOSE CH.7-2LB-MOVE START);
        J3;
        SETB3125; J171; (PHASE CONTROL );
244;        SET101; (FAIL 001/01, CALL MESSAGE INVALID);
175;        =R115; SETB200; =M15; Q15; JE70;
174;        SET201; J175; (FAIL 002/01, TEXT NOT ON TEXT TAPE);
172;        SETAYU0; (ADDRESS OF P.T. IDENTIFIER); JS26P1;
        J4;
        Z38; SET1; SHL+38; DUP;
243;        ERASE; OR; =Z38; (SET KIDSGROVE WORKER);
169;        Z8; SHL-16; SHL+16; =Z8; (INITIAL BLOCK COUNT);
        VOP755; =Q15; M-I15; Z44; =MOM15; Z45;
234;        JSP755; J3;
        VOP755; SHL-32; SET29; -; J235=Z;(IF IND. BL. NOW TRANS.);
        ZERO; NOT; J234; (377.S);
235;        ZERO; NOT; SHL-24; DUP; =YU30;
        SHC-6; =YU31; (MASK FOR FIND CONTROL);
        E2; SHL-6; SHL+6; SETB31; OR;
        =YU0; E3; SHL+6; SETB27; SHLD-6;
        ERASE; =YU1; V29; SETB77402;
        NEV; JSE70; (FIND CONTROL );
        J3;
        V5; V4; JS8P1;
        J4;
1;        (COPY CONTROL FROM CH.8 BUFFER TO CH.7 BUFFER-TO E.M.);
        ZERO; JS27P1; (FETCH NEXT BLOCK, SUMCHECK LOST);
        J4;
        VOP755; =Q15; SET1; =+C15; M-I15; (30/1/AB);
246;        MOM13Q; DUP; SHL+32; SHL-40;
        SETB276; NEV; J245=Z;(IF E.M.);
247;        =MOM15Q; J246C15NZ; MOM13Q; =MOM15Q; MOM13; =MOM15;
        Z8; NOT; NEG; =Z8;
        JS11P755;(TRANSFER BLOCK CH.7); J3; J1;
245;        (E.M. FOUND); SETB377; SHL+8; OR; (DELETE E.M.);
249;        =MOM15Q; J248C15Z; MOM13Q; J249;
248;        JS10P755; (FORM NEW CHECK SUM FOR,AND TRANSFER,E.M. BL);J3;
        SETB107577; SHC-15; DUP; =YW0; =YW32;(1ST WORDS OF
        CH.7 BUFFERS); J242;
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3;        SET603;
4;        SET300; -; JSP9;
162;        SETB2022; Z39; J7*GEZ;
        ERASE; SETB1001; SHL+7; JSE70;
6;        Z39; STR; ERASE; ZERO; NOT;
        CONT; =Z39; SETB3125;
7;        =I15; SETB157010; =M15; Q15; JE70;
242;        (N.B. FIRST WORD OF GEN. U/C WILL START NEW CH.7 BLOCK);
        Z38; SHL+4; STR; =V3P755;(*NEQ IF TEXT PRINTOUT REQ.);
        ERASE;
        JS9P1; (CLOSE CH. 8);
        J4;
        V5; V4; C3; JS5P1; (OPEN TEST CHANNEL);
        J4;
        SET193; SHL+32; NOT; NEG; =Z9;
        V18; JS1P4;
        V26; JSP7;
        SETB614; M2; =C5; =M5M2Q;
        ZERO; =RM6; ZERO; =RC7;

        M=17;
        SETB100000; =C3;

32;        JSP1; (OLD READERS START HERE);

        J23;
        I1; J10*NEZ;
        SETB214; J11*NE; (INITIAL BS NOT BEGIN);
        COTOQ6; DC6;
        Z38; SHL+4; J5*LTZ; ZERO; =V5P9; J10;
5;        V28; =YFO;
        V28=B7761745217234777;
10;        DUP; SHL-6; =C15; J12C15Z; (ALPHA);
        DC15; J13C15Z; (DECLARATORS);
        SETB200; J31=; (COMMENT);
        SETB217; J13=; (OWN);
        DUP; SET15; AND;
66;        SHC-1; DUP;
        =M15; SHL-44; =C15; V8M15; DUP;
        SHLC15; C15; =+C15; REV; NC15;
        SHLC15; =LINK; DUP; J14*GEZ;
        REV; DUP; SHL-4; SET7; AND;
        =C15; J15C15NZ; (NOT OPENING BRACKETS);
        DUP; JSP6;
        J16;
        REV; J14;
15;        DUP; I1; NEV; SETB217; AND;
        J17*NEZ;
        I1; SHL-8; +; DC15; REV;
        V23; V22; J39C15NZ; ERASE; ERASE;
        REV; JS1P6;
        J19;
        REV; V25; V24;
39;        DUP; SHL-32; =+C1; CAB; STR;
        SHAD+4; SHA+2; =C15; PERM; SHLDC15;
        ERASE; SHAD-4; ERASE;
14;        SHL+1; STR; SHLD+1; J18*GEZ;
        DUP; Q3; NEV; J20*LTZ;
18;        SHL+1; STR; SHLD+1; =TR; STR;
        J37TR;
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        Q3; STR; REV; ERASE; NEV;
37;       Q3; SHL+3; DUP; J164*GEZ;
        SHL+1; SHL-1; SET-320; JSP9;
164;       SHL-3; REV; CONT;
        =Q3; SHL+1; DUP; J21*GEZ;
        REV; DUP; =C4; REV;
21;       SHL+1; DUP; J22*GEZ;
        REV; DUP; JSP7;
        REV;
22;       SHL+1; J38*GEZ;
        ERASE;
38;       EXIT; (TREE ON CLASS OPERATIONS);
11;       SET-10; J4;
16;       SET-11; J4;
17;       SET-12; J4;
19;       SET-13; J4;
20;       SET-314; JSP9;
        J18;
153;       SET-314; JSP9;
        DUP; SETB40; SHL+8; OR; JSP6;
        J16;
156;       SETB2000; I1; OR; =I1;
155;       ERASE;
154;       JSP1; J23; ZERO; NOT; JSP7;
        SETB214; J158=;
        SETB230; J159=;
        SETB245; J159=;
        SETB120; J161=;
        SETB234; NEV; J154*NEZ;
        JS1P6; J19; I1; SHL+37; J47*GTZ;
        I1; SETB42214; NEV; J154*NEZ;
        JS1P6; J19; J154;
161;       Q3; SHL+3; ZERO; NOT;
        SHLD-3; ERASE; =Q3;
        J13;
158;       Q3; SHL+3; ZERO; NOT; SHLD-3;
        ERASE; =Q3; SETB40; J123;
159;       I1; SETB400; AND; J10*NEZ;
        J155;

112;       DC15; J143C15NZ; (NOT ARRAY);
        DC1; SETB211; J140*NE;
        NC1; C1TOQ10; VR; C1; SHA+42;
        SHL-33; J144V; (TOO MANY ELS.IN SEG.);
        JSP16;
        J42;
        M5M10; OR; =M5M10; DUP;
142;       COTOQ1;
        Q3; SHL+3; SHL-3; =Q3;
        ZERO; CAB; J138;
140;       J108C1NZ; J141;
89;       I1; SETB13; NEV; J41*NEZ;
        JS1P6;
        J16;
        SET1; =C10; M15; NOT;
        NEG; VR; SHA+41; J88;
26;       MQM9Q;
25;       JSP7;
        J26C9NZ;
        ZERO; SET16; J66;
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24;       JSP4;
          J150;
          J28;
          VR; DUP; SHA+32; ERASE; SETB1235;
          J27V;
          ERASE; SETB2235; REV;
29;          SHL+32; OR; SET17; J66;
28;          SETB635;
27;          REV; JSP45;
          J29;
          V16=QB12427/AR10/AR10;
23;          J4;
150;          SET300; =; JSP9; ZERO;
151;          ERASE; JSP1; J4; DUP; SETB13;
          =; J151*LEZ;
          ZERO; SETB2235;
          REV; J29;


13;          Q3; ZERO; NOT; SHLD+2; NOT;
          J101*NEZ; (DECLARATOR NOT IN BLOCK HEAD);
          J102*GEZ; (SECOND AND SUBSEQUENT DECLARATORS);
          MOTOQ7; J16C2Z;
          SETB160000; =+C3; JS2P7;
          DUP; SHL+41; J103*LTZ; (BEGIN FOR STATEMENT);
          SETB40; NEV; SETB160000; =+I1;
103;          I1; SETB176777; AND; =I1;
          VR; C7; NEG; NOT; DUP;
          =C7; NEG; DUP; =M3; SHA+39; SHL-7; OR;
          M6; NOT; NEG; DUP; =M6;
          SHA+40; SHL-15; OR; J104V;
          DUP; JSP7;
          C5; =M15; M5M15; =Q8; M2;
          =I8; Q8; =M5M15; =Q15 ; I5;
          =C15; IOTOQ15; M2; DUP; =C5;
          =I5; Q15; =M5M2Q;
          M7; J32*NEZ;
102;          DUP; M7; NOT; AND; SHL+42;
          J101*LTZ; (SPECIFIER IN BLOCK HEAD);
          DUP; SHL-3; SET8; -; =C15;
          M7; J105C15NZ;
          SETB177377; AND;
116;          SETB177637; AND;
117;          J101*NEZ;
106;          M7;
111;          OR; =M7; JSP1;
          J23;
          DUP; SHL-6; =C15; J107C15Z; (ALPHA);
          M7; J108*LTZ; (NON-ALPHA AFTER COMMA);
          DC15; J13C15Z; (COMPOUND DECLARATOR);
108;          SET-319; JSP9;
          J157;
163;          SET-320; JSP9;
          ERASE; ZERO; J113;
107;          DUP; SET12; -; J108*LTZ; (NUMERIC);
          SET31; =C2; M5; =+M2; Q2;
          JSP3; (PACK IDENTIFIER);
          J4;
          I5; =C2; Q14; Q2; JSP5;
          J113;
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                VR;
                DUP; SETB177377; AND;
                SETB140; NEV; J163*NEZ;
                CAB; ERASE; M7; SETB777; AND;
                SETB540; J130=;
                OR; SETB30; M7; AND;
                SETB20; NEV; J128=Z;
                I6; DUP; NOT; NEG; =I6;
                SHL+32; OR;
                M4; SHL+24;
130;                OR; =M5M14; =Q14; M7; SHL+39;
                STR; NOT; =+C1; Q9TOQ2; ERASE;
                SETB246; J131=;
                SETB230; NEV; J108*NEZ; (NOT SEMICOLON);
                SETB140; =M7; J149C1NZ; (SPECIFICATION NOT COMPLETE);
                SETB230;
                (END OF PROCEDURE HEADING);
133;                DUP; =C4; JSP7;
                SETB100000; =C3;
                M3; =C5;
                MOTOQ6; COTOQ7;
                SETB40614; JSP6;
                J16;
                SETB314; M4; SHL+40; OR; J103;
113;                PERM; =Q14; =Q2;
                M2; M5; NEG;
                =+M2; M1; -; DUP; =C2;
                J16*LTZ;
                J118*NEZ;
                M7; SHC+42; STR; J127*LTZ;
                DUP; SHL+6; J145*LTZ;
                COTOQ1;
145;                SHL+1; J119*GEZ; (NOT PROCEDURE, SWITCH);
                M7; SHL+44; J109*GEZ; (PROCEDURE);
                SETB265; J108*NE;
                JSP16;
                J42;
                SETB13;
119;                I6; DUP; NOT; NEG; =I6;
                SHL+8; M4; OR; SHL+24;
126;                M7; SETB777; AND; OR; DUP;
                =M5M2Q; JSP7; (OUTPUT CODEWORD);
                M7; SETB130; NEV; J142=Z;
139;                SETB246; J110*NE; (TERMINATOR NOT COMMA);
                DC1; SETB253; JSP7;
131;                ERASE; M7; SETB100000; J111;
134;                J135*LTZ;
                JSP1; J23;
135;                SETB234; J108=;
                SETB245; J108=;

                SETB230; J134*NE;
                SETB140000; =C3; JS1P6;
                J19;
                J147;
105;                IM2TOQ10; DC15; J114C15NZ;
                DUP; SHL+45; J136*NEZ;
                M7; NOT; NEG; =M7;
136;                SETB177377; AND;
115;                SETB177670; AND;
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        J116;
114;        DC15; J115C15Z; (*PROCEDURE);
        DC15; J116C15Z; (*SWITCH);
        SET-4; =*C15; J116C15Z; (*LABEL , *STRING);
        SET-2; =*C15; J101C15NZ; (NOT *OWN);
        REV; ERASE; SETB400; REV; J117;
101;        SET-318; JSP9; J157;
104;        SET-17; J4;
110;        M7; SHC-6; SHL-45;
        =C15; J112C15NZ;
141;        SETB230; J108*NE;
147;        MOTOQ7; JSP7;
149;        JSP1;
        J23;
148;        SETB200; J10*NE;
34;       ERASE; JSP1;
        J23;
        SETB230; J34*NE;
        ERASE;J149;
30;       ERASE; J32;
        V8=QB100/AR58/AR31;
        V13=Q0/AR35/AR35;
        V9=QB43507/AR32/AR32;
58;       (ARITHMETIC OPERATORS);
        DUP; SETB301; -; J82*LTZ;
        J82C4Z;
        C4; SETB377; AND; SETB235; J59=;
        SETB224; J59=;
        SETB232; J59=;
        SETB233; J59=;
        ERASE; SETB40; +; DUP;
59;       ERASE; J82;
31;       SETB160; AND; DUP; J33*NEZ;
        ERASE; C4; SETB214; J34=;
        SETB230; J34=;
        SET-315; JSP9; J34;
35;       ERASE; SET-15; J4;
33;       SETB40; J30=;
        SETB60; J200=;
        J35;
        V15=QB144/AR13/AR36;
36;       SETB216; J35=;
        J30;
        V14=QB2104/AR50/AR40;
40;       SETB214; J41*NE;
        Q3; J153*GEZ;
        C3; SETB60000; OR; =C3;
        I1; SHC-9; J43*LTZ;
        SETB40;
123;        DUPD; SETB360; AND;
        OR; M4; SHL+40; OR;
138;        JSP7;
        SHL+8; OR;
        JSP6; J16; J32;
43;       ERASE; I1; DUP;
        SETB177377; AND; =I1;
        SETB40614; NEV; J32*NEZ;
        SETB160000; =+C3;
        MOTOQ7; J32;
63;       ERASE; JS1P6;
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          J19;
41;          I1; SETB1225; J63=; (CLEAR *THENS);
          SETB131; J63=; (CLEAR LABELS);
          DUP; J19=Z;
          SETB637; AND; SETB214; NEV; J44=Z;
          I1; SETB17; AND; SETB14; NEV;
          J17*NEZ;
          SETB234;
44;          SETB230; J61=;
          I1; SHL-12; SHL+4; OR;
          I1; SHL-8; SETB373; AND;
          SETB40; J45=;
          SETB142; J45=;
          SETB143; J45=;
          REV; DUP; J16C2Z;
          I5; =M15; M5M15;
          =Q8; C8; DUP; M2;
          I1; SETB170377; AND;
          SETB40214; NEV; J137*NEZ;
          ERASE; =M9; M5M9;
          ZERO; SHLD+16; REV;
          ZERO; SHLD+16; =C7;
          SHL-16; M2; SHLD-16;
          ERASE; =M5M9; DUP;
137;          =C8; =I5; Q8;
          =M5M15; SHL+32; OR;
          =M5M2Q;
          M3; SHL+32; OR;
          M6; SHL+25; OR;
          REV;
45;          REV;
          M4; SHL+40; OR; JSP7;
          JS1P6;
          J19;
          I1; SHL+37; J155*LTZ;
          ZERO; REV; SHLD-1;
          SETB40; NEV; J134=Z;
          J41*LTZ;
47;          JSP1;
          J48;
          SETB230; J10=;
          SETB234; J10=;
          SETB245; J10=;
          ERASE; J47;
49;          SET616; J4;
          48; DUP; SET2; +; J23*LTZ;
          ERASE; I1; J49*NEZ;
          V26; SETB20; OR;
          JSP7;
          JS4P7;
          SETB240; JSP8;
          JS3P754;
          SETB634; =M5M2;
          M2; SHL+32; MQM5;
          OR; =MQM5;
          SETB130141; SHC+1; JSE70;
          DUMMY; DUMMY; DUMMY;
          JS7P1;
          DUMMY; DUMMY; DUMMY;
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        Z9; Z8; SHLD+16; SHC-16; =Z8;
        ERASE; (COPY OF FIRST FREE LABEL NUMBER);
        J162;
        V27=Q0/B2022/B157010;
        V26=Q256/0/B614;
        V22=Q1/0/B44300;
        V23=B2214431063104300;
        V24=Q0/0/B55740;
        V25=B2676433267115760;
80;       SETB204; J81*NE;
        J82C4NZ; (LAST BS NOT AN IDENTIFIER );
        SETB3400; =*I1; SET7; +;
82;       SET7; J62;
81;       SETB224; J82=; (CLOSING EXPRESSION BRACKET );
        M15; JSP15;
        J83;
        J84;
83;       DUP; J23*LTZ;
        J35*GTZ; (INVALID PARAMETER COMMENT);
        SETB3604; JSP6;
        J16;
        =C1; ERASE; SETB246;
        J10;

        V10=QB140000/AR90/AR80;

        ( ROUND BRACKETS . IF . THEN . ELSE );
90;       SETB265; J91*NE; (NOT := );
        SETB107; J62;
91;       DUP; SHL-4; SET8; -; =C15;
        J92C15NZ; ( NOT IF );
        SETB27; REV; ZERO; Q3; J93*GEZ;
        ERASE; SETB131; JSP6;
        J19;
        SET2; (STATEMENT IF);
93;       DUPD; +; PERM; SHL+8; +; JSP6;
        J16;
        REV; J62;
78;       ERASE; JS1P6;
        J19; (DENEST LABELS);
92;       I1; SETB377; AND; SETB131; J78=;
        SETB20; +; J17*NE;
        I1; JS1P6; (DENEST LAST *IF OR *THEN);
        J19;
        SHL-8; DUP; SHL+2; SETB27; OR;
        PERM; REV; DUP; PERM;
        SETB375; AND; SETB245; NEV; J93*NEZ;
        OR; REV; J62;
V11=Q0/AR35/AR120;
(FOR ETC);
120;      SETB206; J121*NE;
        Q3; STR; REV; =Q3; J20*GEZ;
        DUP; JSP6;(FOR TO BRACKET STACK);
        J16;
121;      I1; SETB206; NEV; J124*NEZ;
        SETB326; J122*NE;
        JS1P6; J19;
        SETB214; SETB143; CAB;
        SETAR123; =LINK;
        SETB137; SHL+40; J14;
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124;        SETB246; J17*NE;
        ERASE; I1; DUP; SHL-8; +;
        SETB17; AND; SETB240; OR; SET1;
        =+C1;
122;        SETB107; J62;
        V12=QB2304/AR70/AR60;
        (GO TO,SEMICOLON,SQUARE BRACKETS,COLON);
60;       SETB230; J89=;
        SETB163;
62;         SHL+40; SETAR32; =LINK; J14;
61;         SETB33; J62;

84;         (CLOSING BRACKET ACTION);
        PERM; ERASE; SETAR10; =LINK;
        SET7; SHL+40; J14;

128;        I3; DUP; NOT; NEG; =I3;
        DUP; SHL+40; REV; SET192; -;
        J130*LEZ;
        SET-321; JSP9;
        J130;
127;        SHC-42; SETB77677; AND; DUP; J126=Z;
118;        SET-320; JSP9; J157;
109;        SETB402214; JSP6;
        J16;
        M4; I7; NOT; NEG; DUP;
        =I7; DUP; SET96; -; J132*LEZ;
        SET-321; JSP9;
132;        DUP; =M4;
        SHL+8; OR; SHL+32; M7;
        SETB777; AND; OR; DUP;
        SHL+45; J125=Z;
        I6; DUP; NOT; NEG; =I6;
        SHL+10; OR;
125;        J16C2Z; DUP; =M5M2Q; JSP7;
        J16C2Z; SETB254; SHL+32; C7;
        SHLD-16; ERASE; I5; SHLD-16;
        ERASE; C5; =M3;
        M2; DUP; =C5; =I5;
        =M5M2Q; SETB230; J133=;
        SETB204; NEV; J108*NEZ;
        SETB213; JSP7;
        SETB100140; MOTOQ7; COTOQ1;
        J106;
143;        SET-3; =+C15; J3C15NZ;
        SETB224; NEV; J108*NEZ;
        JSP15;
        J146;
        SETB230; NEV; J108*NEZ;
        SETB233; JSP7;
        DC1; NC1; C1; ZERO; SHLD+42;
        J104*NEZ; SHL-16; C5; =M15;
        I2TOQ15; M-I15; M5M15; OR; =M5M15;
        SETB10000; =+C3; SETB140; =M7;
        Q2TOQ9;
166;        JSP1; J23;
        SETB200; J167*NE;
168;        ERASE; JSP1;
        J23;
        SETB230; J168*NE;
```

```
          ERASE; J166;
167;        SETB237; J148*NE;
          ERASE; SETB540; J106;
146;        DUP; J23*LTZ;
          J35*GTZ;
          SETB246; J139;

12;         DUP; SET11; -; J24*LEZ;
          V19; JSP3; J4;
          SETAYB0; DUP; =RM9; -; =C9;
          SETB271; J65*NE;
          Q3; J64*LTZ;
65;         DUP; SETB265; NEV; SETB100; REV;
          J68*NEZ;
67;         SETB1000; OR; J25;
68;         REV; DUP; PERM;
          SETB211; NEV; J25*NEZ; (NOT *();
          Q3; SHC+4; STR; NOT; SHL+7;
          =C8; ZERO; NOT; CONT; SHC-4;
          =Q3; J25C8Z; (INNER *();
          JS6P7; (HOLD);
          J25;
64;         ERASE; SETB131; DUP; SHL+39; M6;
          SHLD-7; ERASE; M3; SHLD-8; ERASE;
          M4; SHLD-8; ERASE; Z9; SHC+16;
          DUP; NOT; NEG; SHC-16; =Z9;
          SHLD-16; ERASE; Q2; (LABEL DECN. CODEWORD);
69;         J16C2Z;
          MOM9Q; =M5M2Q; J69C9NZ;
          =Q15; I5; =C15; M5; =+M15;
          Q14; Q15; JSP5;
          J79;
          ERASE;
77;         =Q14; J118;
79;         J77*NEZ;
          =Q14; J16C2Z;
          DUP; =M5M2Q; ZERO; REV; J138;

70;         SETB211; J71*NE; C8TOQ1;
          SETB400; =+I1;
          NOT; NEG;
72;         JSP7; J32;
71;         SETB232; J73*NE;
          M15; J72*GEZ;
          JSP7;
          JSP1;
          J23;
          SETB265; J74*NE;
          JS5P7;
          SETB1000; OR; JS3P7;
74;         JS7P7;
          Q3; SHC+4; STR; ERASE; SHC-4;
          =Q3; J10;
73;         SETB231; J72*NE;
          M15; REV; DUP; JSP7;
          REV; SHA-1; VR; SHA+42;
88;         SHL-23; J76NV;
144;          SET-323; JSP9;
          J157;
42;         SET-6; J4;
```

```
75;       JSP16;
          J42:
76;       DUP; M5M10; OR; =M5M10Q; J75C10NZ;
          ERASE; SETB140000; =C3; SETB231; J141*NE;

          ERASE; JSP1;
          J23;
          DC1; NC1; J139;

157;       I1; DUP; SETB377; AND;
          SETB214; NEV; DUP; CAB;
          SHL-12; SET4; NEV; OR; J160=Z; J156=Z;
          JS1P6; J19; J157;
160;       ERASE; M7; SHL+42;
          MOTOQ7; J156*LTZ;
          MOM1; SETB2000; OR; =MOM1;
          J156;
50;       DUP; SETB100; AND; J51=Z; (NOT *TRUE OR *FALSE);
          SETB40; =; SETB107; J62;
51;       SET1; REV; COTOQ8;
          SETB215; J54=; (*Q);
          ERASE; ERASE; SET-324; JSP9;
          J157;
52;       JSP6; (*Q TO BRACKET STACK);
          J16;
53;       JSP1; (FETCH NEXY ABS);
          J23;
54;       DUP; CAB; ZERO; SHLD+8; =C9;
          OR; J56C9Z;
          JS6P45;
          J55C8NZ;
          DC8; SHL+32; SETB215; OR; JSP7;
          ZERO;
55;       ERASE; C9; (MARKER FOR OUTPUT);
56;       REV; SETB377; J57=;
          SETB215; J52=; (*Q);
          SETB235; NEV; J53*NEZ; (NOT *U);
          JS1P6;
          J16;
          I1; SETB215; NEV; J53=Z; (NOT LAST *U);
          SETB377;
57;       J54C9Z; (FILL LAST OUTPUT WORD WITH DUMMY ABS);
          ERASE; ERASE; J32;


200;       (CODE BODIES);
          (V30= LAST D LIST ENTRY);
          V31=B0561 2031 0551 4242;
          V32=B1100 0030 0041 6230;
          V33=Q1/1/AV38;
          V34=Q4/1/AV35;
          V35=B4741 4321 0500 1230;
          V36=B4742 2000 0600 1230;
          V37=B5041 3424 0621 3230;
          V38=B0402 1424 0760 0630;
          V39=B5001 5400 4617 7777;
          V40=B0521 7033 0000 0000;
          ERASE; Q3; J201*GEZ;
          I1; SETB40614; NEV; J201*NEZ;
          M-12; M5M2; DUP; =V30; SHL-32;
```

```
        =RC10; Q2TOQ15; C1OTOQ15; M5; =+M15;
        Q14; Q15; JSP5; (CHECK FORMAL LIST);
        J202=Z;
216;        SET-401; JSP9; (FORMALS INVALID IN CODE);
        J157;
202;        =Q14; J216C15Z;
        M15; J203*NEZ; (NOT STARRED);
        IOTOQ10; (SET STARRED FUNCTION MARKER);
203;        SET4; =C11; SETB241; (CODE SPEC SEPARATOR);
204;         SETB241; NEV; J205*NEZ; (WRONG SEPARATOR);
        JSP1;
        J23;
        DUP; SET9; -; J205*GTZ; (NONNUMERIC);
        JSP4; (NUMBER READ);
        J205; (FAIL);
        J205; (FLOATING POINT);
        REV; DC11; J204C11NZ;
        SET159; -; ABS; SET7; -; J205*NEZ; (WRONG TERMINATOR);
        SETB41; SHL+40; M4; SETB120033;
        SHL+32; SET2; COTOQ11; JSP14; (P*LTLEVEL*GTV*LTVSTORES*GT);
        J205;
        SET14; -; J205*GTZ; (TOO MANY SJNS);
        ZERO; SHLD+44; J205*NEZ; (TOO MANY QS);
        REV; SHLD-4; J205*NEZ; (TOO MANY NS);
        M4; SHLD-16; ERASE; SETB216; OR;
        SET1; SHL+21; OR; JSP7; (CODE WORD);
        I10; J207=Z; (£FUNCTION);
        V31; JSP754;
        V32; JSP754; (LINK/=YOM2Q/);
        DC11; DC11;
207;        SETB236; JS1P754; (SP BEFORE INSTRUCTION);
        JSP1;
        J23;
        SETB360; J210*NE; (NOT *EXIT);
        ERASE; V33; =Q9; I10; J209=Z;
        V34; =Q9;
209;        MOM9Q;
223;        JSP754;
        JSP13;
        J209C9NZ;(OUTPUT APPROPRIATE SEQUENCE);
211;        JSP1;
        J23;
        SET159; -; ABS; SET7; -; J207=Z; (TERMINATOR);
212;        SET-403; J165;
201;        SET-400; J165;
205;         SET-402;
165;        JSP9;
        J157;
210;        SETB300; J231*NE; (NOT *ALGOL);
        ERASE; V39; JSP754; (PO/);
        V30; =M5M2Q;
        JSP1;
        J23;
        SETB230; J10=;
        ERASE; J212;
231;        DUP; SET10; -; J213*GEZ; (NOT DIGIT);
        SETB240; JS1P754;
        COTOQ11; J214; (NEWLINE FOR LABEL);
208;        JSP1;
```

```
        J23;
214;        DUP; JS1P754;
        SET159; -; ABS; SET7; -; J208*NEZ;
        JSP13;
        J207; (SKIP TO END OF INSTRUCTION);
213;        SETB204; J215=; (OPENING BRACKET);
        MOTOQ10; SETB242; J217=; (=);
        SETB25; J218*NE; (NOT J);
        SET1;
219;        =M10; JSP1;
        J23;
218;        SETB215; J220=; (FORMAL INSTRUCTION);
        M10; J214=Z; (1 ABS READ);
        REV; JS1P754;
        M10; J214*LTZ; (NOT A JUMP);
        SET1; =C11; J214;
217;        ZERO; NOT; J219;
226;        ERASE; =Q14; SET-405; JSP9;
        J157;
222;        (USERCODE COMMENTS);
        JSP1;
        J23;
215;        DUP; JS1P754;
        SETB204; J221*NE; (NOT OPENING BRACKET);
        JSP6;
        J16;
        J222;
221;        SETB224; NEV; J222*NEZ; (NOT CLOSING BRACKET);
        JS1P6;
        J16;
        I1; SETB40614; NEV; J222*NEZ; (DENEST);
        SETB230; JS1P754;
        J211;
220;        ERASE; M10; J206=Z;
        ERASE;
206;        JSP1;
        J23;
        DUP; SETB100; -; J224*LTZ; (ALPHA NUMERIC);
225;        SET-404; JSP9;
        J157;
224; DUP; SETB14; -; J225*LTZ; (NONALPHA);
        Q2TOQ9; SET31; =C2; M5; =+M2;
        Q2; JSP3; (READ FORMAL IDENTIFIER);
        J4;
        =Q15; M15; M1; -; J16*LTZ;
        SETB235; NEV; J225*NEZ; (NOT *Q);
        C10TOQ2; Q14; Q2; JSP5;
        J226; (FORMAL NOT IN LIST);
        REV; =Q14; Q9TOQ2; DUP; SETB377;
        AND; SETB171; NEV; NEG; NOT;
        M10; NEG; NOT; NEV; J212*GEZ;
        M10; J227*LEZ; (NOT J*QFORMAL*U);
        SET2; I10; -; SETB30; SHL+40;
        C15; NEG; SETB114044; SHL+32;
        SET237; V40; SET3; JSP14;
        J205; (JSP237/Y*LTFORMAL*GTM1/);
        JSP13;
        SHL*39; J229*LTZ; (CALL BY VALUE);
        SET206; V40; SET3; JS1P14;
        J205; (JSP206/);
```

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229;      SET223; SETB12433; SHL+32; SET2; JSIP14;
          J205; (JP223/);
          SET1; =C11; J211;
227;      (FETCH OR STORE);
          DUP; SETB30; AND; M10; AND;
          J212*NEZ; (STORE TO NON*LTTYPE*GT FORMAL);
          SETB770; AND; SETB140; NEV; J230=Z;
          SET2; I10; -; SETB30; SHL+40;
          C15; NEG; SETB117044; M10; SHA+10;
          -; (*LTSP;=*GTY*LTFORMAL*GTM*LT1;2*GT/);
233;      SHL+32; SET2; JSP14;
          J205;
          J211;
230;      (*LTTYPE*GT FORMALS BY NAME);
          SET2; I10; -; SETB30; SHL+40;
          C15; M10; *; NEG;
          SETB114044; SHL+32; SET234; V40;
          SET3; JSP14;
          J205; (JSP234/Y*LTF;F+1*GTM1);
          JSP13;
          SET206; V40; SET3; JSIP14;
          J205; (JSP206/);
          M10; J228*LTZ; (STORE);
          SET236; V40; SET3; JSIP14;
          J205; (JSP236/);
          J211;
228;      SET3; SETB121030; SHL+32; SET2; JSIP14;
          J205; (=M3/);
          SET235; V40; SET3; JSIP14;
          J205; (JSP235/);
          SET3; SETB30; SHL+40; ZERO;
          SETB121044; J233; (=YOM3/);

P1V15;    (FETCH ABS WITH LIBRARY EXTRODION);
          (NORMAL ENTRY=FETCHS 1 ABS TO N1*D47);
          (ENTRY 6=INITIALISE CHANNEL 6,BUFFERS IN N1 AND N2);
          (ENTRY 8=INITIALSE CHANNEL 8);
          (ENTRY 2=INITIALISE CHANNEL 2);
          (ENTRY 3=START ROD FROM LIBRARY A0);
          (ENTRY 4=CLOSE CHANNEL,NUMBER IN N1);
          (ENTRY 7=CLOSE CHANNEL 6);
          (ENTRY 9=CLOSE CHANNEL 8);
          (NORMAL EXIT=EXIT2);
          (FAILURE EXIT=EXIT1,N1=FAILURE NUMBER);
          (=1 EM,=2 INITIAL EM,=3 PANACEA);
          (=4 INVALID BS OF POST BLOCK NUMCHECK FAILURE);
          (=5 INVALID CRLF ON 5=CHANNEL);
          (=7 INVALID LIBRARY CALL);
          V6=B0702620225; (CNCRRCRL);
          V7=B1212121212121212;
          V8=B20202020;
          V9=QAV10/AV12/B157400;
          V12=-1; (MASH FOR LIBRARY FIND);
          V13=B7777000000000000;
          V14=QAYL0/AYL31/0;
          V15=QAYL32/AYL63/0;
16;       V1; DUP; =C15; SHL-32; SET2;
          NEV; J74=Z;
24;       V0; (PORTIAL WORD AT ABS);
```

```
14;       ZERO; SHLD+8;
15;       REV; DUP; J10*NEZ; (ABS REMAINING);
          ERASE; J13C13NZ; (NOT END OF LINE);
          J23C15NZ; (NOT END OF BLOCKS);
11;       C14; JS27; EXIT1;
          SET30; =C15; (RESET BLOCKS WORD COUNT);
23;       DC15; MOM13Q; ZERO; SHLD+8; NEG;
          NOT; SHC+41; DUP; J22*GEZ;
          SHL+2; SHL-43; DUP; =+M13; NEG;
          =+C15; ERASE; J11C15Z; (BUFFERNOW EMPTY);
          J23; (SKIP N DUMMY LINE);

22;       SHC+2; DUP; SHLD-43; REV; J28*NE;
          DC6;
28;       DUP; =C13; (LINE WORD COUNT);
          NEG; =+C15; OR; J14;

13;       SHL+40; MOM13Q; SHLD-40; J15;
10;       =V0; C15; JS40;
          SETB377; J17*NE;
          ERASE; J16;

40;       SHL+32; V1; SHL-16; SHLD+16; =V1;
          ERASE; EXIT1;

29;       (END OF LIBRARY ROUTINE,RESORT TO PREVIOUS CHANNEL AFTER);
          (LOST LIBRARY REGREST,RED NEXT REQREST OTHERWISE);
          ERASE; SETB60000; JSE70; (CLOSE CHANNEL 8);
          J20;
          V2; =V0; V3; =V1; V4;
          =Q13; V5; =Q14; Q3; SHC+5;
          SHL+1; STR; =TR; SHC-6; =Q3;
          J16NTR; (AFTER LOST LIBRARY REQUEST IN SEGRENT);
          SETB320;
35;          SETB320; J18*NE; (NOT LIBRARY);
          Q3; SHL+5; J30*LTZ; (LIBRARY CALL IN LIBRARY ROUTINE);
          ERASE; JSP1;
          EXIT1;
          DUP; SHL-6; J30*NEZ; (INITIAL BS NOT ALPHARUSERIC);
          JSP1;
          J31;
          DUP; SET10; -; J32*LTZ; (NEXT BSO-9);
          DUP; (FAILURE PATH,LIBRARY CALLS);
33;          ERASE;
34;          ERASE;
30;          SET-7;
31;          REV; ERASE; EXIT1;

3;        SET12; SETB230; ZERO; J38;
          (CALL LIBRARY AO);

32;          JSP4; (READ LIBRARY NUMBER);
          J34; (NUMBER REED FAIL);
          J33; (FLOABING POINT);
38;          V7; REV; FRB; V8; OR;
          ZERO; SHLD+24; J33*NEZ; (NUMBER*GT9999);
          CAB; V6; +; SHLD+18; =V10;
          =V11; ZERO; NOT; REV; SETB246;
          J36=; (TERMINATOR COMMA);
          SETB230; NEV; J30*NEZ; (INCALID TERMINATOR);
```

```
        SHL+1; DUP;
36;       REV; SHL+46; SHL-5; Q3; OR;
        =Q3; V0; =V2; V1; =V3;
        Q13; =V4; Q14; =V5; V9;
        JSE70; (FIND LIBRARY TECT);
        J30;
        ERASE; V14; V15; JS8P1;
        EXIT1; (INITIALISE LIBRARY READ);
        J16; (FETCH FIRST ABS);

18;       JSP11; (CHECK ABS FOR EDITING SYMBOLS);
        J16; (IGNORE EDIBIG SYBMOLOS);
        DUP; JSP8; (ABS TO CVNT LINE BUFFER);
        EXIT2;

19;       ERASE; (PANACEA FAILURS);
20;       SET=3; EXIT1;

6;      SET6; J5; (OPEN CHANNEL 6);

2;      SET2; (OPEN CHENNEL 2);
5;      DUP; SHL+32; =V1; =RC14;
      =Q15; SETB121100; C14; OR; =M15;
        Q15; JSE70; (INITIATE CHANND);
        J20;
        C14; SET2; NEV; J41*NEZ;
        JS11P2; (STORE START ADDRESS,INITIALISE CHARCTER FETCH);
        SETAV35P10; =RM14; J42;

41;       SET1; SHL+40; =V0; J25C6NZ;
        Z35; J25*LTZ;
26;       =M15; I15=-1; IM15TOQ13; SET12; =+M13;
        SETB177702; =MOM13Q;
        SET7; =+M15; E7; =MOM13Q; ZERO;
        =MOM13Q; SET6; =C13;
        MOM15Q; SET2; NEV; =MOM13Q;
£43;      MOM15Q; =MOM13Q;
£;      J43C13NZS;
        ZERO; =MOM13Q; MOM15Q; DUP; =Z45;
        =MOM13Q; MOM15; DUP; =Z44; SHL+24;
        SHL-24; =MOM13Q; ZERO; =MOM13; SET13;
        =+M13; M15; =I13; SETB160303; =C13;
        Q13; SHC+16; JSE70; (PRINT TITLE);
        J20;
        COTOQ13; SET-11; =+M13; Q13; SET8;
        OUT; DC6;
25;       ERASE;
42;       QOTOQ13; EXIT2; (END OF OPEN);

8;      ZERO; J5; (OPEN CHANNEL 8);

7;      SET6; (CLOSE CHANNEL 6);
4;      SETB60000; OR; JSE70;
        J20;
        EXIT2;
9;      ZERO; J4; (CLOSE CHANNEL 8);

27;       (FETCH NEXT BLOCKS,SUMCHECK LOST);
        SETB160000; OR; JSE70;
        J19;
```

```
        =Q13; SET30; =RC15; M13TOQ15; ZERO;
        DUP;
£12;        MOM15Q; STR; +D;
£;        J12C15NZS;
        MOM15; SHL-32; (BLOCK NO.); STR; +D;
        M+I14; SHL+16; M14; SHLD-16; ERASE;
        MOM15Q; NEV; REV; MOM15; NEV;
        OR; J21*NEZ; (SUM SEEPERCE CHECK FAIL);
        EXIT2;
21;       SET-4; EXIT1; (SUM,SEQUENCE FAIL);

74;       (FETCH ABS FROM CHENNEL 2); VR; JS75;
        J69;
        DUP; J76*GEZ;
        SHA-36; J69; (EM; EXIT1 WITH N1=-1 OR-2);
76;       DUP; SHL+2; SHA+1; J77*LTZ; (T OR S);
        J78V; (NOT ALPHA);
        I13; J18*LTZ; (ALPHA SEQUENCE);
78;       M13; JS40; Q12; =VO; VOP10;
        SHL-16; =RM12; I12=-1; I14=-1; I13=+1;
        M12MOH; DC12; SHL+10; REV; J80;
        (INITIALISE BS FELCH ENTER LOOP);

81;       (QUARTER WORD FETCH WITH INCREMENT);
        C12; NEG; SHC-1; DUP; =M15;
        M12M15H; REV; J82*GEZ;
        SHL+12;
82;       DC12; EXIT1; (M12 LOSE ADDRESS,C12-CUNENT);

123;      (START OF RAIN LOOP,ABS READ);
        JSP8; (BS TO LINE BUFFER);
83;       ERASE;
84;       JS75; (FETCH NEXT CHARACTER);
        J68;
80;       DUP; SHL+4; SHL-40; JSP11;
        J83; (EDITING SYMBOLS IN COMPOUND BS);
        ERASE; I13; SHC-2; J85*GEZ; (NL=FALSE);
        DUP; NOT; SHL-46; J83=Z; (T IN ABS);
85;       J86C13NZ; (CHARACTER BOUGHT FROM BUFFER);
        DUP; VOP10; =Q15; =M15M13H; M13;
        NOT; NEG; DUP; =M13; C15;
        -; J86*LTZ; (STON CHARACTER IN BUFFER AND);
        MOTOQ13; (INCORRECT POINLIR WITH ENDAVOID CARRY);
86;       ZERO; SHLD+4; =C15; ZERO; NOT;
        NEG; SHLC15; SHC-4; DUP; =Q15;
        CAB; SHA-2; AND; J87=Z; (CURRENT);
        (CHARACTER ROTA VALID SUCCESSOR);
88;       DUP; SHL-40; SHL+40; JS81;
        NEV; ZERO; SHLD+8; J89*NEZ;
        (CHARACTER NOT THE NEXT IN THE UNECT PARTIAL BS);
        REV; ERASE; DUP; J90*GEZ;
        DC12; (SKIP NEXT ENTRY IN TABLE);
90;       SHL+1; C15; NOT; SHL+35; SHC+1;
        I13; SHL-1; OR; SHL+1; =I13;
        (NL:=NL OR NOT ALPHARUMERC,END:=FALSE);
        ZERO; SHLD+1; J84=Z; (NOT END CH BS);
        JS81;
        SHL-36; =I14; I13; DUP; SHC-2;
        J91*LTZ; (NL=TRUE);
        NOT; NEG; =I13; J84; (END:=TRUE);
```

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89;       J87*GEZ; (NO NOU ALTERATIVES TO TRY);
          JS81; (FETCH ADDRESS OF NEXT TRY);
          SHL-36; NEG; =C12; J88;

91;       (POTENTIAL END OF BS CONTAINING NON-ALPHA CHARACTERS);
          I14TOQ12; ERASE; M13; JS40; (MOVE);
          (BUFFER LOSE ADDRESS); DUP; SHL-46;
          J92=Z; (NO VALID SUCCESSOR SUIT WITH BS);
          IOTOQ13; J84; (NL:=FERD:=ID:=FALSE);
87;       (EXIT PATH,FINAL CHECKS AND BUFFER UPDATING);
          I13; SET1; NEV; C15; SHL-10;
          OR; SHL+45; J92*NEZ; (NL OR ROT END OR ALPHA);
          M13; NEG; NOT; JS40; I14TOQ12;
92;       ERASE; M13; V1; =M13; M13;
          -; DUP; J93*GEZ;
          VOP10; SHL-32; =+C13; (FESET BUFFER POINTERS);
93;       =+C13; I12; VO; =Q12; DUP;
          MAX; J94*LTZ; (NO BS READ);
          SHL+36;
77;       IOTOQ13; J95NV; (INITIAL TERMINATOR);
79;       SHL+4; SHL-40;
17;       SETB276; J35*NE; (NOT EM);
          Q3; SHL+5; J29*LTZ; (EM IN LIBRARY ROUTINE);
          ERASE; ZERO; NOT; EXIT1;

95;       ERASE; J74; (IGNORE INITIAL TERMINATORS);

94;       (NO BS READ:FAIL IF NON ALPHA CHARACTERS HERE);
          (OCCURED,OTHERWISE SET ID AND OUTPUT FIRST OF);
          (SEQUENCE OF ALPHA BS);
          VR; SHL-46; DUP; I13; AND;
          SHL-1; J96*NEZ; (NL SET:FAIL-4);
          SHL+15; =I13; J74;

96;       NOT; DUP; (FAILURE NUMBER);
68;       ERASE;
69;       EXIT1; (FAILURE EXIT FROM BS READ);

75;       (FETCH CASELESS CHARACTER FROM INPUT DEVICE OR);
          (INTERVAL CHARACTER BUFFER); J110C13Z; (BUFFER EMPTY);
          VOP10; =Q15; M15M13H; DC13; J98C13Z;
          M13; NOT; NEG; DUP; =M13;
          C15; -; J98*LEZ;
          MOTOQ13; (UPDATE BUFFER PRINTER CYCLICLY);
98;       EXIT2;

£99;       C14; J101*NE; (0:NEW LINE);
£100;      ERASE; J97; (01:IGNORE);
£;       DUMMY; £DUMMY; £DUMMY; £DUMMY;
£;       SETB377; J203; (2-6:INVALID,MORNING ORD IGNORE);
£;       =+M14; (7:CASE);
97;       JSP2; (FETCH CHARACTER);
          J102;
          SHC-1; DUP; =M15; M14M15H; REV;
          J103*GEZ;
          SHL+12; (QUARTER WORD FETCH FROM A TABLE);
103;       DUP; J104*LTZ; (EXTERNAL CHARACTER);
          ZERO; SHLD+4; =LINK; STR; SHAD-40;
          CONT; EXITAR99; (TREE ON INTERNAL TYPE);
```

```
110;        (ENTRY); C14; SHA-12; J97=Z;
        C14; SETB3777; AND; SHL+36;
104;        SHL+1; DUP; J105*LTZ; (MULTIPLE);
        J106C14NZ; (LOST CHARACTER A MULTIPLE);
        SHL-1; EXIT2; (CASELESS CHARACTER *D11);

106;        SHL-37;
109;        ZERO; J107; (CLEAR MULTIPLE);

105;        SHL-37; C14; J100=; (IGNORE REPEATS);
        DUP; SETB2000; -; REV;
107;        C14; NOT; J108=Z;
        =C14; SHL+36; EXIT2; (SET MULTIPLE IN C14);

108;        OR; SETB10000; OR; C14; REV;
        =C14; SHC-1; J204*GEZ; (VALID RELINE);
        C14; SHA-1; SET-305; -; JSP9;
204;        SETB240; EXIT2; (NUV LINE);

101;        C14; NOT; J100*GTZ;
        DUP; =C14; NOT; J97=Z;
        DC6; J97; (COUNT LINES);

102;        DUP; NOT; J109*NEZ;
        EXIT1;

203;        AND; NEG; JSP9;
        J97; (WARNING MESSAGE,IGNORE CHARACTER);
        (END OF BASIC SYMBOL FETCH);
```

```
P2V1;       ZERO; V0;
3;        ZERO; SHLD+6; PERM; OR; DUP;
        J9=Z; (WORD EMPTY FETCH NEXT);
        REV; SETB75; J5=; (EM);
        REV; =V0; EXIT2; (NORMAL EXIT);
5;        ERASE; V0; J6=Z;
        ERASE; ZERO;
6;        NOT;
7;        ZERO;
11;        =V1; SET1; SHL+42; =V0;
8;        EXIT1;
9;        ERASE; V1; =Q15; J15C15NZ;
        ERASE;
10;        SETB160002; JSE70;
        J4;
        =Q15; SET1;
15;        MOM15Q; Q15; =V1; J3;
4;        SET-3; J7;
1;        =Q15; SETB121002; =M15; Q15; JSE70;
        J4;
        ZERO; REV; J11;
14;        SETB160002; JSE70;
        J4;
        ERASE;
2;        SETB102; JSE70;
        J4;
        DUP; J13*LTZ;
        ERASE; EXIT2;
13;        SHL+3; J14*GEZ;
        SETB60002; JSE70;
```

```
                J4;
                EXIT2;
          P10V152;
                V0=Q18/AV67/AV1;
                V34=Q18/AV67/0;
                V35=B4636 3001 4640 3003;
                V36=B4656 3005 3420 0400;
                V37=B3010 3011 3012 3013;
                V38=B3014 3015 3016 4641;
                V39=B4000 4001 4002 4003;
                V40=B4004 4005 4006 4007;
                V41=B4010 4011 7377 4012;
                V42=B4630 4701 4721 4013;
                V43=B3040 4014 4015 4016;
                V44=B4017 4020 4021 4022;
                V45=B4023 4024 4025 4026;
                V46=B4027 4030 4031 4032;
                V47=B4033 4034 4035 4036;
                V48=B4037 4040 4041 4042;
                V49=B4043 4044 4045 3073;
                V50=B3074 3075 3076 0400;
                V51=B4636 3101 4640 3103;
                V52=B4656 3105 0400 3760;
                V53=B3110 3111 3112 3113;
                V54=B3114 3115 3116 5376;
                V55=B4601 4611 4631 4602;
                V56=B4702 4642 4661 4621;
                V57=B4604 4624 7377 3133;
                V58=B4630 4722 4616 4646;
                V59=B3140 4046 4047 4050;
                V60=B4051 4052 4053 4054;
                V61=B4055 4056 4057 4060;
                V62=B4061 4062 4063 4064;
                V63=B4065 4066 4067 4070;
                V64=B4071 4072 4073 4074;
                V65=B4075 4076 4077 3173;
                V66=B3174 3175 3176 0400;
                V67=B0002 7756 0006 0271;
                V68=B5044 0265 7763 4234;
                V69=B0012 0215 4634 0015;
                V70=B0235 4054 0020 0222;
                V71=B6054 0023 0262 1272;
                V72=B0043 7761 1152 0037;
                V73=B7761 1422 7761 1602;
                V74=B7761 1244 0315 1502;
                V75=B7761 1564 0206 1632;
                V76=B0063 7761 1572 0055;
                V77=B7761 1642 7761 1244;
                V78=B0335 1322 7761 1242;
                V79=B7761 1464 0225 1352;
                V80=B0112 7761 1274 0071;
                V81=B0205 1472 0106 7761;
                V82=B1622 7761 1242 7761;
                V83=B1302 7761 1242 7761;
                V84=B1564 0102 1442 7761;
                V85=B1524 0263 1172 0142;
                V86=B7761 1512 0132 7761;
                V87=B1502 7761 1422 7761;
                V88=B1242 7761 1142 7761;
                V89=B1464 0103 1242 7761;
```

```
V90=B1302 7761 1342 7761;
V91=B1464 0214 1152 0162;
V92=B7761 1572 0156 7761;
V93=B1562 7761 1142 7761;
V94=B1744 0110 1462 7761;
V95=B1224 0223 1612 0217;
V96=B7761 1712 0510 7761;
V97=B1342 7761 1622 7761;
V98=B1202 7761 1324 0130;
V99=B1622 7761 1252 0207;
V100=B7761 1524 0266 1562;
V101=B7761 1342 7761 1462;
V102=B7761 1304 0172 1512;
V103=B0231 7761 1574 0225;
V104=B0243 1702 7761 1464;
V105=B0217 1252 0254 7761;
V106=B1472 0241 7761 1224;
V107=B0234 1432 0250 7761;
V108=B1602 7761 1244 0245;
V109=B1542 7761 1664 0303;
V110=B1572 0265 7761 1242;
V111=B7761 1142 7761 1424;
V112=B0101 1532 0323 7761;
V113=B1562 7761 1502 7761;
V114=B1202 7761 1242 7761;
V115=B1222 7761 1642 7761;
V116=B1562 7761 1244 0120;
V117=B1432 0323 7761 1142;
V118=B7761 1162 7761 1242;
V119=B7761 1424 0171 1212;
V120=B0342 7761 1502 7761;
V121=B1442 7761 1442 7761;
V122=B1242 7761 1462 7761;
V123=B1624 0200 1472 0351;
V124=B7761 1502 7761 1624;
V125=B0203 1312 0362 7761;
V126=B1502 7761 1622 7761;
V127=B1504 0210 1712 0375;
V128=B7761 1322 7761 1342;
V129=B7761 1422 7761 1244;
V130=B0226 1672 0410 7761;
V131=B1142 7761 1422 7761;
V132=B1642 7761 1244 0237;
V133=B1652 0423 7761 1462;
V134=B7761 1622 7761 1342;
V135=B7761 1424 0306 1232;
V136=B0430 7761 1504 0326;
V137=B0332 0434 7730 0114;
V138=B0312 0447 7761 0562;
V139=B7761 0442 7761 0642;
V140=B7761 0564 0300 0412;
V141=B0460 7761 1062 7761;
V142=B0502 7761 0764 0360;
V143=B0552 0471 7761 0362;
V144=B7761 0422 7761 0224;
V145=B0260 1422 7761 1352;
V146=B0313 7761 1162 7761;
V147=B1562 7761 1142 7761;
V148=B1562 7761 1744 0320;
V149=B1252 0200 7761 1302;
```

```
          V150=B7761 1442 7761 1242;
          V151=B7761 1462 7761 1624;
          V152=B0340 0000 0000 0000;
P3V0;       V0=B7760140200200000;
          V0; PERM; J3;
4;          ERASE; J5;
1;          V0; J2;
6;          DUP; SHL=1; SET5; NEV; J7=Z;
          J4C15Z; (31 WORDS FULL; IGNORE);
          OR; VR; SHA+8; J5V;
          NOT; NEG; =MOM15Q; V0;
5;          Q15;
2;          JSP1;
          J13;
          REV;
3;          =Q15; DUP; SHL=6; J6=Z; (ALPHA);
7;          REV; DUP; J8*LTZ;
          VR; SET5;

9;          REV; SHA+8; REV; NEG; NOT;
          J9V;
          SHL+3; +; NOT; NEG; =MOM15Q;
          DUP;
8;          ERASE; SET31; C15; -; DUP;
          =C15; DUP; NEG; I15; *D;
          CONT; =+M15; DC15; J10*GTZ;
          J11;
12;         MOM15; C15; SHA+3; SET2; +;
          +; =MOM15Q;
10;         J12C15NZ;
11;         M+I15; Q15; EXIT2;
13;         PERM; ERASE; ERASE; EXIT1;
P4V8;         V3=B3244647411363216;
          V4=B1067311107601054;
          V5=B2372617635665123;
          V6=B2567106670407501;
          V7=B6625327150150035;
10;         VR; V0; SHL-5; SET1; AND;
          =R19;
11;         QOTOQ8; ZERO; NOT; V0; SET16;
          AND; M9; OR; J2*NEZ;
          REV; J3;
1;          =V0; EXIT1;
          (MAIN LOOP);
4;          REV; ERASE;
5;          J6C8Z;
          DC8;
7;          DUP; SET10; *D; J4=Z;
          SET1; =+C8; ERASE; REV;
8;          ERASE; V0; SET4; AND; M9;
          OR; J9*NEZ;
13;         SET256; =M9;
6;          C9; J14*LTZ;
          M9; J15*GTZ;
          DUP; CAB; +; J8V;
          REV;
16;         ERASE;
15;         M+I8;
2;          JSP1;
          J12;
```

```
3;      DUP; =C9; V0; SHL-40; -;
        DUP; DUP; SHA-3; -; SHA-3;
        J17*NEZ;
        SET5; +; M9; J18=Z;
        M9; AND;
18;     DUP; J19=Z;
        REV; DUP; J7*GEZ;
        COTOQ8; J16;
17;     (NON-DIGITS);
        ERASE; C9; DUP; =V8; DUP;
        V0; SHL+8; OR; SET1; =C9;
        REV;
20;     REV; ZERO; SHLD+8; CAB; REV;
        DC9; J20*NE;
        ERASE; J21C9Z;
        SHL-8; C9; NOT; J22*NEZ;
21;     SHC=17; M9; OR; J9*LTZ;
        J23C9NZ;
        ZERO; NOT; =M9;
14;     DUP; J24*GEZ;
        J25C8Z;
        NOT;
26;     NEG;
24;     M8; I8; -; J9*LTZ;
        I9; J27*GEZ;
        NEG;
27;     J28C9NZ;
        Q8; =V1; =V2; J11; (READ EXPONENT);
23;     I8; J9*NEZ;
        I8=+1; J2;
19;     C8; NOT; NEG; =C8;
        REV; DUP; NOT; J16=Z;
        REV; J16;
31;     ERASE; V0; SET2; AND; SHA-1; I8;
        OR; M9; +; J5*LEZ;
        J13;
        (OUTPUT CONVERSION TO SFB);
28;     M9;I8; OR; J33=Z;
        M9; J29*GEZ;
        V1; =Q8; =+C8; V2;
29;     C8; M8; -; V3; *D;
        SHAD+2; DUPD; ROUND; DUP; =Q9;
        ZERO; REV; -D; CONT; DUP;
        DUP; *; SHA-7; DUP; V4;
        *; V5; +; REV; V6;
        +; V7; REV; *DIV; +;
        REV; SHA-4; DUPD; +; PERM; -;
        SHA+1; *DIV; REV; DUP; ZERO;
        JSL77; FIX; NEG; =C8; ERASE;
        SHLC8; *; Q9; SET48; +;
        C8; -; JSL77; J9V;
30;     V8; REV; EXIT2;
        (SIGNS AND TERMINATORS);
25;     J26C9Z;
        M9; I9; OR; I8; OR;
        V0; OR; SET8; AND; J2=Z;
        J9;
22;     ERASE; SET-6; C9; SHA+1; -;DUP;
        J31*GTZ;
        NOT; REV; DUP; NOT; I9;
```

```
                OR; C8; OR; I8; OR;
                J32=Z;
                REV; J31;
        9;        SET-8;
        12;       REV; ERASE; EXIT1;
        32;       REV; =I9; J2;
        33;       V8; REV; EXIT3;
        P5V1;       (SEARCH DECLARATION LIST + CODE BODY FORMALS);
                DUP; =V0; =Q15; C15; =RM14;
                I14=-1; SET-2; =RC15; J9;
        2;        SHC-2; STR; SHL-43; REV; SHL-1;
                AND; NEG; =+M14; (STEP TO CODE WORD);
                V1; =Q15; J1C15Z; (FORMAL CHECK CANCELLED);
                M5M14; DUP; SHL+45; J10=Z;
                SETB770; AND;
                SETB540; J7=; (*LTTYPE*GT FORMAL BY VALUE);
                M+I15; SETB140; J8=; (BY NAME);
                SETB160; J7*NE;
        10;       SET2; =C15; (INVALID CODE BODY FORMAL);
        8;        DC15;
        7;        ERASE; DC15;
        9;        Q15; =V1;
        1;        M+I14; V0; =Q15;
                M14; M5; +; M15; NEV;
                J5=Z; (ADDRESS OF UNKNOWN IDENTIFIER FOUND IN LIST);
                M5M14Q; DUP; SHC-1; J3*LTZ; (IDENTIFIER);
                DUP; SHL-32; DUP; =M14; J6=Z;
                SHL+42; STR; ERASE; SHA+1; ERASE;
                J1; (END DIGIT TO VR);
        4;        M5M14Q;
        3;        MOM15Q; J2*NE;
                SHC-2; J4*LTZ;
                M5M14; V1; =Q15; EXIT2;
        5;        V1; =Q15; ZERO;
        6;        VR; EXIT1; (N1*NEQ IMPLIES NOT IN LIST);

        P6;         J3C2Z;
                I1; SHL+32; C1; SHLD-8; ERASE;
                SHL-1; M6; SHLD-7; ERASE; M3;
                SHLD-8; ERASE; M4; SHLD-8; ERASE;
                =MOM1N; =I1; COTOQ1; ZERO; NOT;
        2;        DUP; =+C2; NEG; =+M1; EXIT2;
        1;        I1; J3=Z;
                MOM1; C1; =M15; STR; SHAD+7;
                =M4; SHL+1; STR; SHAD+7; =M3;
                SHL+1; STR; SHAD+6; =M6; SHL+2;
                STR; SHAD+7; =C1; SHL-31; =I1;
                SET1; J2;
        3;        EXIT1;
        P7V4;       V0=0;
                V0; J3*GEZ;
                V2; Q14; =V2; =Q14;
                DUP; J10=Z;
                I14; J9*LTZ;
        17;       C14; I14; *D; CONT; =+M14;
                NC14; V1; =Q15;
        12;       J11C15NZ;
                SETB160005; JSE70;
                J3P0;
                =Q15;
```

```
11;       MOM14Q; =MOM15Q; J12C14NZ;
        Q15; =V1; SETAV3; =RM14;
9;        =MOM14Q;
16;       Q14; V2; =Q14; =V2;
13;       ZERO; NOT; =V0; EXIT1;
10;       M-I14; MOM14; M+I14; J9*NEZ;
        ERASE; J16;
3;        V0; DUP; J19*LEZ;
        =M15; =MOM15; J13;
4;        JS20;
        ZERO; =V0; SETB60005; =C15; Q15;
        SHC+16; JSE70;
        J3P0;
        EXIT1;
5;        V2; =Q15; C15; I15; *D;
        CONT; =+M15; I15; NEG; =I15;
        J14C15NZ;
19;       SET609; J4P0;
2;        V2; DUP; =Q15;
15;       ERASE; J19C15Z;
        M-I15;
14;       SET1; =+C15; MOM15; DUP; J15=Z;
        M15; =V0; EXIT1;
20;       V0; J19*GEZ;
        V2; Q14; =V2; =Q14;
        ZERO; J17;
6;        JS20;
        M5; M2; +; ZERO; NOT;
21;       =RI15; DUP; =M15; =V0; ZERO;
        =MOM15Q; Q15; =V2; EXIT1;
7;        JS20;
        SETAV3; SET1; J21;
8;        SETB121005; J18;
1;        SETB121105;
18;       V0; J19*NEZ;
        SHLD-16; ERASE; SHC+16;
        SETAV3; DUP; =V0; =RM15;
        ZERO; =MOM15Q; Q15; =V2; JSE70;
        J3P0;
        =V1; EXIT1;

P8V1;
        V0=Q120/1/0;
        QOTOQ15; SETB240; J1=;
        V1; DUP; J2*NEZ;
        NOT; SET20; =RC15;
£3;       DUP; =YF4M15Q;
£;        J3C15NZS;
        ERASE; V0; DUP; =V1;
2;        =Q15; J4C15Z;
        M15; SHC-3; DUP; =M15; SHL-42;
        =C15; YF4M15; SHCC15; SHL+8; REV;
        SHLD-8; ERASE; NC15; SHCC15; =YF4M15;
        V1; =Q15; DC15; M+I15; ZERO;
1;        ERASE; M15; DUP; SHL-1; AND;
        SET2; AND; Q15; +; =V1;
        ZERO;
4;        ERASE; EXIT1;

P9V5;       V0=B1212121212121212;
```

```
        V1=Q2/2/AYF1;
        V2=QAYFO/AYGO/B134321;
        V3=B77610446134306 36;
        V4=B7761345614625236;
        Z39; STR; ZERO; NOT; OR;
        CONT; =Z39;
        SETB204; JSP8;
        SETB216; JSP8;
        SETB224; JSP8;
5;        V3; =YFO; V4; =YF2;
        V1;
6;        =Q15; DUP; ABS; VO; E3;
        E2; SHLD-42; ERASE;
        SETB1717; AND; SHL+18; TOB; +;
1;        VO; REV; FRB; SHL+17; I15;
2;        SHL+2; SHAD+6; J2NV;
        SETB236; OR; =MOM15Q; ERASE; J3C15Z;
13;             C6; NEG; J1;
3;        V2; =Q15; J7*LTZ;
        SETAYF2; =I15;
        7;
4;        Q15; JSE70; DUMMY; DUMMY;
        ZERO; ERASE; EXIT1;
P11VO;
        SETB236; J1=;
        SETB256; J1=;
        SETB240; J2=;
        ZERO; =VO; EXIT2;
2;        VO; J1*NEZ;
        ZERO; NOT; =VO; ZERO; JSP7;
1;        JSP8; EXIT1;

P12VO;       (OUTPUTS A NUMBER IN N3 AFTER UP TO);
      (SIX ABS FROM N2, NUMBER OF ABS IN N1);
        VO=B1212 1212 1212 0101;
        JS2P754; (OUTPUT ABS);
        DUP; SHL+32; SHL-32; J1=;
        EXIT1; (NUMBER TOO LARGE);
1;        VO; REV; FRB; SET6; =RC15;
        IOTOQ15; ZERO; (LHZ SUPPRESS WHILE I15 = 0);
2;        SHL+2; SHLD+6; DC15; J3C15Z;
        DUP; SHL+40; J4=Z;
3;        I15=+1; (END OF LHZ SUPPRESS);
4;        M+I15; J2C15NZ; (M15 COUNTS SIGNIFICANT DIGITS);
        M15; NEG; SHA+3; =C15;
        SHLDC15; ERASE; (LEFT-JUSTIFY ABS);
        M15; JS2P754;
        EXIT2;

P13;       (INSTRUCTIONS PER LINE COUNTER);
        J1C11Z; (AFTER A USERCODE LABEL);
        DC11; J2C11NZ;
        SETB240; JS1P754; (NEWLINE);
1;        SETB256; JS1P754; (TAB);
        SET5; =C11;
2;        EXIT1;

P14;       (OUTPUTS SEQUENCES OF ABS AND NUMBERS);
        (TERMINATED BY SEMICOLON,SPACE,NORMAL ENTRY);
```

```
                (PAIRS OF DATA WORDS IN N STORE,NUMBER );
                (OF PAIRS IN N1. ENTRY 1: DATA AS FOR P12);
                =C8;
          4;      C8; DC8;
          3;      JSP12;
                EXIT1;
                J4C8NZ;
          2;      SETB114236; SHL+32; SET2; JS2P754;
                JSP13;
                EXIT2;
          1;      COTOQ8; J3;

          P16;       (FIND CODEWORD  DATA:M5=START ADDRESS OF D-LIST);
                (Q10=-/+OR1/REL.ADD. OF IDENT);
                (RESULTS :M10=REL ADD OF CODEWORD);
                (FAILURES:EXIT1 IF ADD. OF 0 WORD);
                (USES:2-NESTS.1-SJNS);
                M5M10; M+I10; DUP; SHC-1; J1*LTZ;
                ERASE; EXIT1;
          1;      SHC-2; STR; SHL-43; REV; SHLD-1;
                AND; I10; *D; CONT; =+M10;EXIT2;
          P45V3;       V0=B5012 7041 5040 6630;
                V1=B1212 1212 1212 1212;
                V2=B4751 7236;
                V3=0;
                V3; =RC15; J4;
          7;      ERASE; YVOM15; EXIT1;
          5;      YVOM15Q; J7=;
                M+I15;
          4;      J5C15NZ;
                SETAYWO; SETAYV1; -;
                M15; -; J6*LEZ;
                DUP; =YVOM15Q; Z9; SHL+32; SHL-32;
                =YVOM15Q; M15; SHA-1; =V3;
          6;      Z9; DUP; NOT; NEG; =Z9;
                SHL+32; SHL-32; DUP; PERM; V1; REV;
                FRB; SHA+18; V0; DUP; SHL+24; PERM; SHL-24;
                SHL+2; SHLD+6; SHL+2; SHLD+6;
                SHL+2; SHLD+6; JSP754; ZERO;
                SHLD+6; SHL+2; SHLD+6; REV; ERASE;
                SHLD+16; CAB; REV; SHL+5;
                SHLD+3; SHL+5; SHLD+3; JSP754;
                Q15; PERM; JS1; JSP754; JS1; JSP754;
                ZERO; SHLD+3; SHL+5; SHLD+3; REV;
                ERASE; SHLD-16;
                ERASE; V2; OR; JSP754;
                =Q15; EXIT1;
          1;      ZERO; SET6; =C15;
          £2;      SHL+5; SHLD+3; £DC15; J2C15NZS;
                EXIT1;

          L77;       REV; DUP; J164=Z; ZERO; FLOAT;
                STR; PERM; ZERO; SHAD+8; CAB;
                +; SHAD-8; DUP; J127*LTZ;
                CONT; REV; CONT;

          128;       EXIT1;
          127;       ERASE;
          164;       ERASE; ERASE; ZERO; J128;
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P100V0;       V0=Q0/B3131/B157010;
      V0; JE70;

P15;       COTOQ8; ZERO;
1;       ERASE; DC8; JSP1;
      EXIT1;
      DUP; SHA+1; SET75; -; ABS;
      SET52; -; J1*LTZ; (ALPHA);
      C8; NOT; J2*NEZ;
      EXIT2; (NOT A PARAMETER COMMENT);
2;       SETB271; NEV; JSP1;
      J3;
      SETB204; NEV; OR; DUP;
3;       ERASE; EXIT1;
P754V0;       (OUTPUT ABS TO CANNEL 7 IN POST FORMAT);
      (NORMAL ENTRY = 6 ABS IN N1);
      (ENTRY 1 = 1 ABS IN N1*D47);
      (ENTRY 2 = N ABS IN N2 LEFT-JUSTIFIED);
      (N*D47 IN N1.);
      (ENTRY 3 = CLOSE NO DATA REQUIRED);
      (WRITES ANY PARTIALLY COMPLETED WORDS OUT AND);
      (CLOSE THE CHANNEL 7, NO LAST BLOCKS, NO MORE START);
      (EXIT = EXIT1 IN THE EVENT OF FAILURE);
      (EXITS TO R4P0 WITH FAILURE NUMBER PRINTS OUT);
      (AS FAIL 01300, THEN CALLS S95);
      SET6;
2;       V0; REV;
11;       PERM; SHLD+7; STR; =TR; SHLD+1;
      J10NTR; (WORD NOT FULL);
      Z39; J12*LTZ; JSP755; J5;
      ZERO;
12;       ERASE; SET1; (NEW WORD FULL MARKER);
10;       CAB; NEG; NOT; DUP; J11*GTZ;
      ERASE; =V0; ERASE; EXIT1;
1;       SHL+40; SET1; J2;
3;       (CLOSE); V0; NEG; NOT; J7=Z;
      ZERO; NOT; JS1;
      J3;
7;       JS3P755;
      J6;
      EXIT1;
5;       ERASE; ERASE;
6;       LINK; ERASE; ZERO; J4P0;
8;       SETB130743; SHC+1; JSE70;
      (CLOSE CH. 7 WRITE 2 LBS); J6;
4;       (OPEN); SET1; =V0; JS1P755; J6;
      Z35; J13*LTZ; (POST);
      E48; SHL+32; J8=Z;
13;       EXIT1;
P755V3;       (32-WORD BLOCKS ABS IN POST FORMAT TO CH.7 MAG. TAPE);
      V1=QAYW0/AYW31/B121107;
      V2=QAYW32/AYW63/0;
9;       (NORMAL ENTRY=6 ABS IN N1);
      V0; =Q15; =MOM15Q; J2C15Z;
      Q15; =V0; EXIT2;
2;       (BUFFER FULL);
      V3; J10=Z;(IF TEXT PRINTOUT NOT REQ.);
      Q15; =V3;
      M15; DUP; =I15; SET29; -; =C15;
      SETB134321; =M15; Q15; JSE70; J7;
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        V3; =Q15; ERASE;
10;       (ALSO ENTERED FROM R248P0);
        M15; SET30; DUP; =RC15; -;
        =M15; ZERO; DUP;
£5;       MOM15Q; STR; +D;
£;      J5C15NZS;
        Z8; DUP; NOT; NEG; =Z8;
        SHL+32; SHL-32; DUP; REVD; CAB;
        STR; +D; DUP; SHA-6; J8*NEZ;
        SHL+16; CAB; SHLD-16; ERASE;
        =MOM15Q; =MOM15Q;
11;       SETB160007; J4; (ALSO ENTERED FROM R247P0);
1;      (OPEN);
        V2; V1;
4;      JSE70;
        J7;
        NOT; NEG; SET3; SHL+32; -;
        =V0; EXIT2;
3;      (CLOSE);
        V0; SHL-32; SET29; -; J6=Z;
        ZERO; NOT; JS9;
        J7;
        J3;
6;      V0; NEG; NOT; =I15;
        SETB60007; =M15; Q15; JSE70;
        J7;
        EXIT2;
8;      ERASE; ERASE; ERASE;
7;      EXIT1; (FAILURE EXIT);
        FINISH;
*EM
```