



```
0 'SOS, Ascii file editor From Dec-10 SOS, Thor-1/BO
7 PG$="SOS"
30 CLOSE:CLEARA:CLEAR5000
32 DEF FNB(A$)=-(ASC(A$)-64)*((LEN(A$)=1)AND((A$)>="A")AND +
(A$<="Z"))
33 DEF FNO$(A$)=LEFT$(A$,LEN(A$)-1)
34 DEF FNN$(A)=MID$(STR$(A),2)
38 DF=2:LC=0:GOSUB 10002
39 OPEN "R",2,"=SOSERR=",1:FIELD 2,1AS CA$,5ASML$,90ASMS$
40 ON ERROR GOTO 60
45 OPEN "I",1,"=SOS=",1:CLOSE1
50 OPEN "R",1,"=SOS=",1:FIELD 1,10ASS1$
55 ON ERROR GOTO 0:GOTO 110
60 E=1:GOSUB 30000
65 CLOSE 1
70 OPEN "R",1,"=SOS=",1:FIELD 1,10ASS1$
80 FOR A=1 TO 26:LSET S1$="0":PUT 1,A:NEXT A
90 LSET S1$="A":PUT 1,27:CLOSE 1
100 RESUME 45
110 GET 1,27:FB$=LEFT$(S1$,1)
120 GOSUB 20000
130 PC$=FB$+"-":GOSUB 10006:GOSUB 10004:PRINT PC$;
140 CL$="LMPIDWARE":CS$=?+CHR$(20)+CHR$(13)+CHR$(11)+CH +
R$(10)
150 GOSUB 11000
180 IF C1>0 THEN ON C1 GOTO 1000,2000,3000,4000,5000,6000 +
,7000,8000,9000
190 IF C2=0 THEN OUT 17,7:GOTO 150
200 ON C2 GOTO 220,210,130,3100,3200
210 LC=NOT LC
215 GOTO 150
220 PRINT:GOSUB 10004:PRINT "One of these: "CL$:GOTO 130
1000 OUT 17,IC:PC$=PC$+IC$
1010 CL$=":=/,";CS$=CHR$(8)+CHR$(13)+CHR$(20)+"?"+CHR$(21)
1020 GOSUB 10006:GOSUB 10004:PRINT PC$;;GOSUB 11000
1030 IF C1=0 AND C2<>0 THEN ON C2 GOTO 130,1050,1040,1055 +
,130
1035 GOTO 1060
1040 LC=NOT LC
1045 GOTO 1020
1050 E=2:GOSUB 30000:GOTO 130
1055 PRINT:GOSUB 10004:PRINT "One of these "CL$:GOSUB1000 +
6:GOSUB10004:PRINT PC$;;GOTO 1020
1060 IF C1=0 THEN OUT 17,7:GOTO 1020
1070 OUT 17,IC:PC$=PC$+IC$
1080 NB=0:FL$="
1090 CL$=",";CS$=CHR$(8)+CHR$(13)+CHR$(20)+"?"+CHR$(21)
1100 GOSUB 11000
1110 IF C2<>0 THEN 1160
1120 IF C1=1 THEN 1210
1130 IF IC<32 THEN OUT 17,7:GOTO 1100
1140 FL$=FL$+IC$:PC$=PC$+IC$:NB=NB+1
1150 OUT 17,IC:GOTO 1100
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1160 ON C2 GOTO 1170,1180,1190,1200,130
1170 IF NB=0 THEN PC$=FNO$(PC$):GOTO 1010 ELSE PC$=FNO$(P +
C$):NB=NB-1:IF NB=0 THEN FL$="" ELSE FL$=LEFT$(FL$,NB)
1175 GOSUB 10006:GOSUB 10004:PRINT PC$::GOTO 1100
1180 IF NB=0 THEN 1050 ELSE DR=DF:GOTO 1390
1190 LC=NOT LC:GOTO 1100
1200 PRINT:GOSUB 10004:PRINT "A file name or a ',' or a R +
return":GOSUB 10006:GOSUB 10004:PRINT PC$::GOTO 1100
1210 OUT 17,IC:PC$=PC$+IC$
1220 CL$="0123":CS$=CHR$(8)+CHR$(13)+CHR$(20)+"?"+CHR$(21)
1230 GOSUB 11000
1240 IF C1>0 THEN DR=C1-1:OUT 17,IC:PC$=PC$+IC$:GOTO 1310
1250 IF C2=0 THEN OUT 17,7:GOTO 1230
1260 ON C2 GOTO 1270,1280,1290,1300,130
1270 GOSUB 12000:GOTO 1090
1280 E=4:GOSUB 30000:GOTO 130
1290 LC=NOT LC:GOTO 1230
1300 PRINT:GOSUB 10004:PRINT "A drive number":PC$=PC$++" " +
:GOSUB 12000:GOTO 1230
1310 CL$="":CS$=CHR$(8)+CHR$(13)+CHR$(20)+"?"+CHR$(21)
1320 GOSUB 11000
1330 IF C2=0 THEN OUT 17,7:GOTO 1320
1340 ON C2 GOTO 1350,1390,1370,1380,130
1350 GOSUB 12000:GOTO 1220
1370 LC=NOT LC:GOTO 1320
1380 PRINT:GOSUB 10004:PRINT "End with a Return":PC$=PC$++ +
":":GOSUB 12000:GOTO 1320
1390 ON ERROR GOTO 1500
1395 IF NB>8 THEN NB=8
1396 FL$=LEFT$(FL$,NB)
1400 GOSUB 10020:PRINT "[Opening file "FL$","FNN$(DR)"]"
1405 LSET NX$="-1":LSET LL$="-1":LN=0:LSET LS$="2":PUT 3,1
1410 CLOSE5:OPEN "I",5,FL$,DR
1415 GOSUB 10050
1425 ON ERROR GOTO 1510
1430 RR=2
1440 LN=LN+100:LINEINPUT #5,TF$:PRINT FNN$(LN)+" " +
;TF$:LSET CN$=" "
1450 LF=LEN(TF$):TG$=LEFT$(TF$,80):LG=LEN(TG$):LSET TX$=T +
G$:LSET LL$=STR$(RR-1):LSET LN$=STR$(LN):LSET LS$=STR$(LG)
1455 IF LF>80 THEN LSET CN$="*":ELSE LSET CN$=" "
1460 LSET NX$="-1":PUT 3,RR:GET 3,1:LSET LL$=STR$(RR):LSE +
T LS$=STR$(RR+1):PUT 3,1
1470 GET 3,RR-1:LSET NX$=STR$(RR):PUT 3,RR-1
1480 RR=RR+1:IF LF<=80 THEN 1440 ELSE TF$=MID$(TF$,80):GO +
TO 1450
1500 E=3:GOSUB 30000:CLOSE5:RESUME 1515
1510 CLOSE 5:RESUME 1515
1515 GET 3,1:N=VAL(LL$):GET3,N:N=VAL(LN$):GET3,1:LSETLN$= +
STR$(N):PUT3,1
1520 LSET SZ$=STR$(LEN(FL$))::LSET MZ$=FL$:PUT 4,1
1530 LSET SZ$="1":LSET MZ$=FNN$(DR):PUT 4,2
1535 GET 3,1:RA=VAL(LL$)+1
1540 GOTO 130
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2000 OUT 17,IC:PC$=PC$+IC$  
2010 CL$="ABCDEFGHIJKLMNOFQRSTUVWXYZ":CS$=CHR$(8)+CHR$(13)+  
    )+CHR$(20)+"?"+CHR$(21)  
2020 GOSUB 11000  
2030 IF C1=0 AND C2=0 THEN OUT 17,7:GOTO 2020  
2040 IF C1>0 THEN 2500  
2050 ON C2 GOTO 130,2070,2080,2090,130  
2070 E=5:GOSUB 30000:GOTO 130  
2080 LC=NOT LC:GOTO 2020  
2090 PRINT:GOSUB 10004:PRINT "A UC letter from A-Z"  
2100 FC$=PC$+" ":GOSUB12000:GOTO 2010  
2500 OUT 17,IC:PC$=PC$+IC$:NB$=IC$  
2510 CL$=" ";CS$=CHR$(13)+CHR$(8)+CHR$(20)+CHR$(21)+"?"  
2520 GOSUB 11000  
2530 ON C2 GOTO 2600,2540,2550,130,2560  
2540 FC$=PC$::GOSUB 12000:GOTO 2010  
2550 LC=NOT LC:GOTO 2520  
2560 PRINT:GOSUB 10004:PRINT "End with a Return":PC$=PC$+" "  
    ":"::GOSUB 12000:GOTO 2510  
2600 LSET S1$=NB$::PUT 1,27:GOTO 110  
3000 OUT 17,IC:PC$=PC$+IC$:CV$=" ";GOSUB 14000:N=LM  
3010 GOSUB 13000:IF N1<>N OR F1<0 THEN E=6:GOSUB 30000:GO +  
    TO 130  
3015 LSET MZ$=STR$(F1)::PUT 4,3:PO$(1)=" "  
3020 GET 3,F1:LG=VAL(LS$)::IF LG<>0 THEN PO$(1)=PO$(1)+LEF +  
    T$(TX$,LG)  
3025 IF CN$="*" AND VAL(NX$)>0 THEN N=1:GOSUB 13200:GOTO +  
    3020  
3030 GOSUB 60000  
3035 PRINT CHR$(13);  
3040 GOSUB10050:FOR A=1 TO PO  
3050 IF A=1 THEN PRINT FNN$(VAL(LN$));  
3060 PRINT " ";  
3070 PRINT PO$(A)::Y=Y+1  
3080 NEXT A:GOTO 130  
3100 PRINT:GET 4,3:F1=VAL(MZ$)::N=1:GOSUB 13100:GOTO 3015  
3200 PRINT:GET 4,3:F1=VAL(MZ$)::N=1:GOSUB 13200:GOTO 3015  
4000 OUT 17,IC:PC$=PC$+IC$  
4010 CV$="";  
4015 GOSUB 14000  
4020 TI=0:IF C3>0 THEN OUT 17,IC:LINEINPUT HU$::IF HU$<>" " +  
    THEN TI=VAL(HU$)  
4030 PRINT  
4040 N=LM:LI=LM  
4050 GOSUB 13300  
4060 LA=F1:NA=N1:N=1:GOSUB 13200  
4070 LE=F1:NB=N1  
4075 GET 3,1:IF VAL(NX$)=-1 THEN 4100  
4080 IF LI>=NB THEN IF LI=NB THEN LI=LI+100:GOTO 4100 ELS +  
    E 4100  
4090 IF LI=NA THEN LI=LI+2:IF LI>=NB THEN 130  
4100 FM$=FNN$(LI)+" ";GOSUB 16000  
4110 IF IN THEN 130  
4115 PRINT
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4120 OC=1
4125 IF LI<NA THEN OC=2
4130 IF LI>NB THEN OC=3
4135 GET 3,1:IF VAL(NX$)==-1 THEN OC=4
4140 ON OC GOTO 4200,4300,4400,4500
4200 GOSUB 15000:GET 3,LA
4210 LSET NX$=STR$(NC):PUT 3,LA
4220 GET 3,LB:LSET LL$=STR$(NC):PUT 3,LB
4230 LSET LN$=STR$(LI):LSET NX$=STR$(LB):LSET LL$=STR$(LA)
4240 LSET TX$=IN$:LSET LS$=STR$(LEN(IN$)):LSET CN$=" " :PU +
T 3,NC
4241 LA=NC:NA=LI:LSET MZ$=STR$(LA):PUT 4,3
4245 GOTO 4075
4300 GOSUB 15000:GET 3,1:LB=LA:NB=NA
4310 LSET NX$=STR$(NC):PUT 3,1:LA=1:GOTO 4220
4400 GOSUB 15000:GET 3,LA
4410 LSET NX$=STR$(NC):PUT 3,LA
4420 GET 3,1:LSET LL$=STR$(NC):PUT 3,1
4430 LSET LN$=STR$(LI):LSET NX$="-1":LSET LL$=STR$(LA)
4440 LSET TX$=IN$:LSET LS$=STR$(LEN(IN$)):LSET CN$=" " :PU +
T 3,NC
4450 LA=NC:NA=LI:NB=LI:LB=NC:LSET MZ$=STR$(LA):PUT 4,3:GO +
TO 4075
4500 GOSUB 15000:GET 3,1
4510 LSET NX$=STR$(NC):LSET LL$=STR$(NC):PUT 3,1
4520 LSET LN$=STR$(LI):LSET NX$="-1":LSET LL$=" 1":LSET L +
S$=STR$(LEN(IN$)):LSET TX$=IN$:LSET CN$=" " :PUT 3,NC:LA=+
NC:LB=NC:NA=LI:NB=LI:LSET MZ$=STR$(LA):PUT 4,3:GOTO 4075
5000 OUT 17,IC:PC$=PC$+IC$
5010 CV$=" "
5020 GOSUB 14000
5030 N=LM:LI=LM
5040 GOSUB 13300
5050 LI=F1:NC=N1:N=1:GOSUB 13200
5060 FB=F1:NB=N1
5070 IF LI<>NC THEN E=6:GOSUB 30000:GOTO 130
5080 F1=LI:N=1:GOSUB 13100:FA=F1:NA=N1
5085 '
5090 CS=1
5095 IF NA=NC THEN CS=2
5100 IF NB=NC THEN CS=3
5102 GET 3,1:IF VAL(LL$)=LI AND VAL(NX$)=LI THEN CS=4
5105 ON CS GOTO 5110,5200,5300,5400
5110 GET 3,FA:LSET NX$=STR$(FB):PUT 3,FA
5120 GET 3,FB:LSET LL$=STR$(FA):PUT 3,FB
5130 GOSUB 10020:PRINT "[Line"NC" Deleted,"NA" linked to" +
NB"]":GOTO 130
5200 GET 3,1:LSET NX$=STR$(FB):PUT 3,1
5210 GET 3,FB:LSET LL$=" 1":PUT 3,FB
5220 GOSUB 10020:PRINT "[Line"NC" Deleted, top linked to" +
NB"]":GOTO 130
5300 GET 3,1:LSET LL$=STR$(FA):PUT 3,1
5310 GET 3,FA:LSET NX$="-1":PUT 3,FA
5320 GOSUB 10020:PRINT "[Line"NC" Deleted,"NA" linked to" +
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bottom]":GOTO 130
5400 GET 3,1:LSET LL$="-1":LSET NX$="-1":LSET LS$="2":PUT +
3,1
5410 GOSUB 10022:PRINT "[Line"NC" Deleted, top linked to +
bottom]":GOTO 130
6000 OUT 17,IC:PRINT
6010 GET 4,1:IF VAL(SZ$)=0 THEN FI$="" :DR=0:INPUT "Please +
input file:drive to write to ";FI$,DR: IF FI$="" THEN 0 +
UT 17,7:GOTO 6010 ELSE LSET MZ$=FI$:LSET SZ$=STR$(LEN(FI +
$)) :PUT 4,1:GET 4,2:LSET MZ$=FNN$(DR):LSET SZ$="1":PUT 4 +
,2:GOTO 6010
6020 FI$=LEFT$(MZ$,VAL(SZ$)):GET 4,2:DR=VAL(LEFT$(MZ$,VAL +
(SZ$)))
6030 BI$=LEFT$("*" +FI$+ "*",8)
6040 GOSUB 10020:PRINT "[Writing file "FI$","FNN$(DR)" an +
d backup file "BI$","FNN$(DR)"]
6050 CLOSE 5,6
6060 OPEN "O",5,FI$,DR:OPEN "O",6,BI$,DR
6065 GOSUB 10050
6070 GET 3,1
6080 NC=VAL(NX$)
6100 IF NC=-1 THEN 130
6105 GET 3,NC
6110 S=VAL(LS$):PS$="":IF S>0 THEN PS$=LEFT$(TX$,S)
6120 PRINT #5,PS$::IF CN$=" " THEN PRINT #5,""
6125 PRINT #6,PS$::IF CN$=" " THEN PRINT #6,""
6130 PRINT PS$::IF CN$=" " THEN PRINT
6140 NC=VAL(NX$):GOTO 6100
7000 OUT 17,IC:PC$=PC$+IC$
7005 CS=0
7010 CV$=";,"
7020 GOSUB 14000
7030 N=LM:LI=LM
7035 GOSUB 13300:LI=F1:GET 3,LB
7040 IF LI<>N1 THEN E=6:GOSUB 30000:GOTO 130
7050 GOSUB 10050:X=1:Y=23
7060 TL$="":IF VAL(LS$)>0 THEN TL$=LEFT$(TX$,VAL(LS$))
7070 GOSUB 7800
7080 CN=0:CP=1:CM$="1234567890-+" +Q "+CHR$(8)+" +LDIS"+CHR +
$(13)+CHR$(27)+"X"
7085 WAIT16,1:IC=INP(17)AND127:IF IC>95 THEN IC=IC-32
7087 IC#=CHR$(IC):CM=INSTR(CM$,IC$)
7088 IF CM=0 THEN OUT 17,7:GOTO 7085
7090 IF CM<12 THEN 7110
7100 ON CM-11 GOTO 130,7115,7135,7140,7145,7500,7150,7210 +
,7240,7250,7270
7110 IF CM=11 THEN CP=-CP:GOTO 7085 ELSE CN=CN*10+(CM MO +
D 10):GOTO 7085
7115 IF CN=0 THEN CN=1
7120 CS=CS+CN*CP:IF CS<0 THEN CS=0 ELSE IF CS>LEN(TL$) TH +
EN CS=LEN(TL$)
7130 GOSUB 7800:GOTO 7080
7135 CP=-CP:GOTO 7115
7140 CN=99999!:CP=1:GOTO 7115

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7145 CN=99999!:CP=-1:GOTO 7115
7150 CC$=CHR$(20)+CHR$(8)+CHR$(27)+CHR$(13)
7160 WAIT 16,1:IC=INP(17)AND127:IF AC THEN IF IC>95 THEN +
    IC=IC-32
7165 IC$=CHR$(IC):CC=INSTR(CC$,IC$)
7170 ON CC+1 GOTO 7180,7190,7200,7080,7240
7180 IF CS=0 THEN TL$=IC$+TL$:CS=CS+1:GOSUB7800:GOTO 7160 +
    ELSE TL$=LEFT$(TL$,CS)+IC$+MID$(TL$,CS+1):CS=CS+1:IF CS +
    <LEN(TL$) THEN GOSUB 7800:GOTO 7160 ELSE 7160
7190 AC=NOT AC:GOTO 7160
7200 IF CS=0 THEN 7160 ELSE IF CS=1 THEN TL$=MID$(TL$,2): +
    CS=0:GOSUB 7800:GOTO 7160 ELSE TL$=LEFT$(TL$,CS-1)+MID$( +
    TL$,CS+1):CS=CS-1:GOSUB 7800:GOTO 7160
7210 WAIT16,1:IP=INP(17)AND127:IF LC AND IP>95 THEN IP=IP-32
7220 IP$=CHR$(IP):CF=INSTR(CS+2,TL$,IP$):IF CF=0 THEN OUT +
    17,7:GOTO 7080
7230 CS=CF-1:GOSUB 7800:GOTO 7080
7240 LSET TX$=TL$;LL=LEN(TL$):IF LL>80 THEN LSET LS$="80" +
    ELSE LSET LS$=STR$(LL)
7245 PUT 3,LD:GOTO 130
7250 OUT 17,7:GOTO 7080
7270 CS=LEN(TL$):GOSUB 7800:GOTO 7150
7500 IF CN=0 THEN CN=1
7520 C1=CS+CN*CP:C2=CS:IF C1>C2 THEN SWAP C1,C2
7530 IF C1<0 THEN C1=0 ELSE IF C2>LEN(TL$) THEN C2=LEN(TL$)
7535 CS=C1
7540 IF C1=0 AND C2=LEN(TL$) THEN TL$=""":GOSUB 7800:GOTO +
    7080
7545 IF C2=LEN(TL$) THEN TL$=LEFT$(TL$,C1):GOSUB 7800:GOT +
    O 7080
7550 IF C1=0 THEN TL$=RIGHT$(TL$,LEN(TL$)-C2):GOSUB 7800: +
    GOTO 7080
7560 TL$=LEFT$(TL$,C1)+RIGHT$(TL$,LEN(TL$)-C2):GOSUB 7800 +
    :GOTO 7080
7800 PRINT:GOSUB 10010:PRINT CHR$(13);FNN$(LI)";" +
    ;TL$;:GOSUB 10004:PRINT:GOSUB 10010:PRINT FNN$(LI)";" +
    ;:IF CS=0 THEN PRINT ;:RETURN ELSE PRINT LEFT$(TL$,CS)";" +
    RETURN
8000 GOSUB 10002:GOSUB 8500:RUN "RUNOFF",1
8500 PRINT
8510 GET4,1:A=VAL(SZ$):IF A=0 THEN PRINT "[No file]":RETURN
8520 FI$=LEFT$(MZ$,A):GET 4,2:IR=VAL(LEFT$(MZ$,VAL(SZ$)))
8530 PRINT "["+FI$+", "+FNN$(IR)+"]":RETURN
9000 ON ERROR GOTO 0:GOSUB 10002:GOSUB 8500:END:GOTO 9000
10000 END
10002 OUT 17,27:OUT 17,42:RETURN
10004 OUT 17,27:OUT 17,84:RETURN
10006 OUT 17,30:RETURN
10010 OUT 17,27:OUT 17,61:OUT 17,31+Y:OUT 17,31+X:RETURN
10012 X=1:GOSUB 10010:GOTO 10004
10014 OUT 17,27:OUT 17,89:RETURN
10020 X=1:Y=4:GOSUB 10010:GOTO 10004
10022 X=1:Y=3:GOSUB 10010:GOTO 10004
10050 X=1:Y=24:GOTO 10010
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11000 C1=0:C2=0:WAIT 16,1:IC=INP(17)AND127
11010 IF LC THEN IF IC>95 THEN IC=IC-32
11015 IC$=CHR$(IC):C1=INSTR(CL$,IC$):C2=INSTR(CS$,IC$):C3 +
=INSTR(CV$,IC$)
11020 RETURN
12000 PC$=FN0$(PC$):GOSUB 10006:GOSUB 10004:PRINT PC$::RE +
TURN
13000 'Find the line number N in file or approx posit
13001 'Such that if N<> then return at 1>N
13010 GET 3,1:F1=VAL(NX$):F2=VAL(LL$)
13020 GET 3,F1:N1=VAL(LN$):IF N1<N THEN IF F1<>F2 THEN F1 +
=VAL(NX$):GOTO 13020 ELSE 13040
13030 RETURN
13040 N1=N1+100:F1=-1:RETURN
13100 'F1 is present line, N is count to go back, if N so +
es before ^
13101 'then F1,N1 is set to ^
13110 GET 3,F1:F2=VAL(LL$):N2=VAL(LN$):IF F2=1 THEN 13130 +
ELSE F1=F2:N=N-1:IF N>0 THEN 13110
13120 GET 3,F1:N1=VAL(LN$):IF N1=N2 THEN N=N+1:GOTO 13110 +
ELSE RETURN
13130 GET 3,F1:N1=VAL(LN$):RETURN
13200 'F1 is present line, N is count to go on, if N soes +
past *
13201 'then F1,N1 is set to *
13210 GET 3,F1:F2=VAL(NX$):N2=VAL(LN$):IF F2=-1 OR F2=0 TH +
EN 13230 ELSE F1=F2:N=N-1:IF N>0 THEN 13210
13220 GET 3,F1:N1=VAL(LN$):IF N1=N2 THEN N=N+1:GOTO 13210 +
ELSE RETURN
13230 GET 3,F1:N1=VAL(LN$):RETURN
13300 'Like 13000, but fits to one before
13310 GOSUB 13000:IF N=N1 THEN RETURN ELSE IF F1<>-1 THEN +
N=1:GOTO 13100
13320 GET 3,1:F1=VAL(LL$):GET 3,F1:N1=VAL(LN$):RETURN
14000 EL=2^16-1:LM=0
14010 CL$="0123456789,^*":CS$=?"+CHR$(20)+CHR$(13)+CHR$( +
8)+CHR$(21)
14020 GOSUB 11000
14030 IF C1=0 AND C2=0 AND C3=0 THEN OUT 17,7:GOTO 14010
14035 IF C3<>0 THEN RETURN
14040 IF C2<>0 THEN ON C2 GOTO 14050,14060,14070,14080,14 +
090 ELSE 14100
14050 PRINT:GOSUB10004:PRINT "A number or a ',', '*' ,or a +
'~',";PC$=PC$+" ";GOSUB 12000:GOTO 14010
14060 LC=NOT LC:GOTO 14010
14070 C3=0:RETURN
14080 IF LM=0 THEN GOTO 130 ELSE LM=INT(LM/10):GOSUB 1200 +
0:GOTO 14010
14090 GOTO 130
14100 IF C1>10 THEN 14140
14110 OUT 17,IC:PC$=PC$+IC$
14120 IF (LM*10)+(C1-1)>EL THEN E=7:GOSUB 30000:GOTO 130
14130 LM=(LM*10)+(C1-1):GOTO 14010
14140 IF LM<>0 THEN OUT 17,7:GOTO 14010
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14150 OUT 17,IC:PC$=PC$+IC$
14160 ON C1-10 GOTO 14170,14180,14190
14170 GET 4,3:F1=VAL(MZ$):GET 3,F1:LM=VAL(LN$):GOTO 14010
14180 GET 3,1:F1=VAL(NX$):GET 3,F1:LM=VAL(LN$):GOTO 14010
14190 GET 3,1:F1=VAL(LL$):GET 3,F1:LM=VAL(LN$):GOTO 14010
15000 GET 3,1:NC=VAL(LS$):LSET LS$=STR$(NC+1):PUT 3,1:RETURN
16000 IN$="" :CV$=CHR$(13)+CHR$(27)+CHR$(18)+CHR$(8)+CHR$( +
20)+CHR$(21)
16001 TC=17:TF=127:TS=1
16002 GOSUB 10050
16005 PRINT CHR$(13)+CHR$(27)+"Y":;PRINT CHR$(13)+PM$:$IN$:
16010 WAIT TC-1,TS:IC=INP(TC)ANDTF:IC=IC+(32*(LC AND IC>9 +
5)):IC$=CHR$(IC):IF IC>31 THEN OUTTC,IC:$IN$=IN$+IC$:GOTO +
16010
16015 IF LC THEN IF IC>95 THEN IC=IC-32
16020 IQ=INSTR(CV$,IC$):IF IQ=0 THEN OUT TC,7:GOTO 16010
16030 ON IQ GOTO 16040,16050,16005,16070,16080,16000
16040 IN=0:RETURN
16050 IN=-1:RETURN
16070 IF IN$="" THEN OUT 17,7:GOTO 16005
16072 IF LEN(IN$)=1 THEN IN$="":GOTO 16005
16075 IN$=FN0$(IN$):OUT 17,8:OUT 17,32:OUT 17,8:GOTO 16010
16080 LC=NOT LC:GOTO 16010
20000 'Make sure buffer is on 3 and param is on 4
20005 GOSUB 10020
20010 CLOSE3,4:PN=FNB(PB$):GET 1,PN:OP=VAL(S1$)
20030 OPEN "R",3,"=SOSL- "+PB$+"=",1:FIELD 3,8ASLN$,8ASNX$ +
,BASLL$,6ASLS$,80ASTX$,1AS CN$
20040 OPEN "R",4,"=SOSP- "+PB$+"=",1:FIELD 4,4ASSZ$,124ASMZ$
20045 IF NOT OP THEN PRINT "[Building buffer "PB$"]":GOTO +
20070
20050 PRINT "[Opening buffer "PB$]", "":GET 4,1:IF VAL(SZ$ +
)=0 THEN PRINT "No file]": ELSE PRINT LEFT$(MZ$,VAL(SZ$)):" +
:GET 4,2:IF VAL(SZ$)=0 THEN PRINT "]": ELSE PRINT ",":LEF +
T$(MZ$,VAL(SZ$)):"]
20060 RETURN
20070 LSET NX$="-1":LSET LL$="-1":LSET LS$=" 2":PUT 3,1
20080 LSET SZ$="0":PUT 4,1:PUT 4,2:LSET SZ$="2":LSET MZ$= +
"1":PUT 4,3
20085 LSET S1$="-1":PUT 1,PN
20090 RETURN
30000 GOSUB 10022:GET 2,E:IF CA$="F" THEN PRINT "?": ELSE +
IF CA$="W" THEN PRINT "%":
30010 LN=VAL(ML$):IF LN=0 THEN PRINT "No such message": E ELS +
E PRINT LEFT$(MS$,LN)
30020 RETURN
60000 CR$=CHR$(13):LF$=CHR$(10):TB$=CHR$(9):PL=70
60005 PO=1
60010 P1=INSTR(PO$(PO),CR$):IF P1<>0 THEN IF P1=1 THEN PO +
$(PO)=MID$(PO$(PO),2):GOTO 60010 ELSE PO$(PO)=LEFT$(PO$( +
PO),P1-1)+MID$(PO$(PO),P1+1):GOTO 60010
60015 P1=INSTR(PO$(PO),TB$):IF P1=0 THEN 60035
60020 P2=(9-(P1 MOD 8)) MOD 8:IF P2=0 THEN P2=8
60025 IF P1=1 THEN PO$(PO)=SPACE$(P2)+MID$(PO$(PO),2):GOT +

```

```
0 60015
60030 PO$(PO)=LEFT$(PO$(PO),P1-1)+SPACE$(P2)+MID$(PO$(PO) +
,P1+1):GOTO 60015
60035 P1=LEN(PO$(PO)):P2=INSTR(PO$(PO),LF$)
60040 IF P2>PL OR P2=0 THEN 60055
60045 IF P2=1 THEN PO$(PO+1)=MID$(PO$(PO),2):PO$(PO)=" ";P +
0=PO+1:GOTO 60005
60050 PO$(PO+1)=MID$(PO$(PO),P2+1):PO$(PO)=LEFT$(PO$(PO), +
P2-1):PO=PO+1:GOTO60035
60055 IF P1<=PL THEN RETURN
60060 PO$(PO+1)=" "+MID$(PO$(PO),PL-2):PO$(PO)=LEFT$(PO$( +
PO),PL-3)+" ";PO=PO+1:GOTO 60035
```

Total of 9 pages + 2 banner