

SYMBOL/APPEND

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BEGIN
  *** APPEND/CANDE SOURCE PROGRAM, 6-70. ***
  COMMENT: * TITLE: B5500/B5700 MARK XIV SYSTEM RELEASE *
           * FILE ID: SYMBOL/APPEND TAPE ID: SYMBOL2/FILE000 *
           * THIS MATERIAL IS PROPRIETARY TO BURROUGHS CORPORATION *
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           * COPYRIGHT (C) 1971, 1972 BURROUGHS CORPORATION *
           * AA320206 AA386657 *;
REAL COMMON;
SAVE ARRAY ERR[0:4],A,N[0:30],B,PARAMS[0:10];
FILE IN SRCEFIL DISK SERIAL (2,0,0);
FILE IN WRKFIL DISK SERIAL (2,0,0);
FILE OUT OUTFIL DISK SERIAL [20:600] (2,10,300,SAVE 1);
FILE OUT NEWTAB DISK SERIAL [20:30 ] (2,30,300,SAVE 1);
BOOLEAN BRAAK, RESEG, SEQCHK, SFLG, MAKTAB, SUPPRESS, OK;
LABEL NEXTPARAM, TESTREAD, HEADSRCE, HAVESRCE, EOF, EOFWRK;
REAL ADJ, BASE, ECFPTR, ENDRESEG, EOFMARK, HRANGE,
INCR, LINE, LRANGE, LREC, NAP, NCT, NPARAMS, NPTR, OUTSEQ,
PC, PREVSEQ, REC, SRCESEQ, STRTRESEQ, USER, WRKSEQ;
*****00011300
REAL STREAM PROCEDURE HDR(F,N); VALUE N;
*****00011400
*****00011500
BEGIN
  SI:=F; 3(SI:=SI+8); DI:=LOC F; DS:=WDS;
  SI:=F; 14(SI:=SI+8); DI:=LOC F; DS:=WDS;
  SI:=F; N(SI:=SI+8); DI:=LOC HDR; DS:=WDS;
END STREAM PROCEDURE HDR;
*****00012000
*****00012100
PROCEDURE DISKWAIT(I,A,S,D);
VALUE I,S,D; REAL I,S,D; ARRAY A[*]; COMMUNICATE(-8);
*****00012300
*****00012400
PROCEDURE TWXOUT(A,N,T);
*****00012500
*****00012600
VALUE N,T;
REAL A,N,T;
BEGIN COMMUNICATE(-11);
BRAAK := BOOLEAN(T); % MCP RETURNS 1 IF BREAK OCCURRED.
END;
*****00012900
*****00013000
*****00013100
*****00013200
REAL STREAM PROCEDURE INPCONV(X);
BEGIN SI:=X; DI:=LOC INPCONV; DS:=8 OCT; END;
*****00013300
*****00013400
*****00013500
STREAM PROCEDURE OUTCONV(A,N); VALUE N;
BEGIN SI:=LOC N; DI:=A; DS:=8DEC; END;
*****00013600
*****00013700
*****00013800
STREAM PROCEDURE MOVE(N,A,B); VALUE N;
BEGIN SI:=A; DI:=B; DS:=N WDS; END;
*****00013900
*****00014000
*****00014100
*****00014200
STREAM PROCEDURE INFORMUSER(A,NMBR,LAST); VALUE NMBR, LAST;
*****00014300
*****00014400
*****00014500
*****00014600
*****00014700
*****00014800
*****00014810
BEGIN LOCAL SV;
DI:=A; SV:=DI; SI:=LOC NMBR; DS:=8DEC; DI:=SV; DS:=7FILL;
SI:=SV; DI:=SV; 8(IF SC=" " THEN SI:=SI+1 ELSE DS:=CHR);
DS:=40LIT" RECORDS APPENDED (LAST RECORD APPENDED=";
SV:=DI; SI:=LOC LAST; DS:=8DEC; DI:=SV; DS:=7FILL;
SI:=SV; DI:=SV; 8(IF SC=" " THEN SI:=SI+1 ELSE DS:=CHR);

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DS:=16LIT")
END STREAM PROCEDURE INFORMUSER;
%*****
STREAM PROCEDURE MAKERR(ERR,N1,N2); VALUE N1,N2;
%*****
BEGIN LOCAL SV;
DI:=ERR; DS:=15LIT"SEQUENCE ERROR:"; SV:=DI;
SI:=LOC N1; DS:=8 DEC; DI:=SV; DS:=7FILL;
DI:=SV; DI:=DI+8; DS:=2LIT" -";
SV:=DI; SI:=LOC N2; DS:=8DEC; DI:=SV; DS:=7FILL;
END STREAM PROCEDURE MAKERR;
%*****
PROCEDURE ERROR(N1,N2); VALUE N1,N2; REAL N1,N2;
%*****
BEGIN
MAKERR(ERR,N1,N2); TWXOUT(ERR[0],33,1);
END PROCEDURE ERROR;
%*****
A[0]:=0; DISKWAIT(1,A,30,COMMON); % GET ESP RECORD
USER := A[2];
OUTCONV(LINE,A[1],[40:8]); % DECIMAL LINE NUMBER
IF MAKTAB := A[1],[3:1] = 0 THEN % TAB FILE WILL BE REQUIRED
FILL NEWTAB WITH " "8"1T"[6:36:12]&LINE[18:30:18],USER;
FILL SRCEFIL WITH A[3],A[4]; % FILE TO BE APPENDED
FILL WRKFIL WITH A[10],USER; % EXISTING WORK FILE
FILL OUTFIL WITH A[9],USER; % OUTPUT FILE NAME
SUPPRESS := A[1],[8:11] = 1;
IF RESEQ := A[5] NEQ 0 THEN
BEGIN
SRTRESEQ:=A[5]; % LOWER BOUND FOR RESEQUENCE
ENDRESEQ :=A[6]; % UPPER BOUND FOR RESEQUENCE
INCR :=A[8]; % RESEQUENCE INCREMENT
BASE :=A[7] - INCR; % RESEQ BASE
END;
NPARAMS := A[1],[27:6]; % PARAMETER COUNT
READ SEEK(SRCEFIL[0]); EOFPTR:=HDR(SRCEFIL,7); % EOF POINTER
SFLG := HDR(SRCEFIL,4),[36:6] NEQ 8; % NOT TYPE DATA
NCT := -1;
DO BEGIN % TRANSFER WRKFIL RECORDS TO OUTFIL
READ(WRKFIL,10,B[*])[EOFWRK]; WRITE(OUTFIL,10,B[*]);
IF MAKTAB THEN
BEGIN
IF NPTR := NPTR + 1 GTR 29 THEN
BEGIN
WRITE(NEWTAB,30,N[*]);
NPTR := 0;
END;
N[NPTR] := (WRKSEQ:=INPCONV(B[9])) & (NCT:=NCT+1)[4:32:16];
END; % IF MAKTAB
END UNTIL FALSE;
EOFWRK;
CLOSE(WRKFIL);
PREVSEQ := -1;
LREC := 0;
EOFMARK :=100000000;
IF SEQCHK := NPARAMS GTR 0 THEN % PARAMETERS SPECIFIED
BEGIN
MOVE(9,A[21],PARAMS);
REC:=0; NPARAMS:=NPARAMS-1; SRCESEQ:=PC:=-1; LREC:=1;
NEXTPARAM;

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LREC := LREC - 1;                                00020600
LRANGE := HRANGE := PARAMS(PC := PC + 1);        00020700
IF LRANGE = 100000000 THEN % "END"              00020800
  BEGIN                                          00020900
  READ(SRCEFIL[EOFPTR], 14, B[*])(EOF); READ(SRCEFIL); 00021000
  GO TO HAVESRCE;                               00021100
  END;                                           00021200
  IF PC LSS NPARAMS THEN % MORE PARAMETERS AVAILABLE 00021300
  IF PARAMS(PC+1).[1:1]=1 THEN % RANGE SPECIFIED 00021400
  HRANGE := PARAMS(PC := PC + 1).[21:27];       00021500
  IF NOT SFLG THEN % RECORD LOCATION SPECIFIED 00021600
  BEGIN                                          00021700
  READ SEEK(SRCEFIL[LREC := (LRANGE - 1) * REAL(LRANGE NEQ 0)]); 00021800
  GO TO READSRCE; % SKIP BINARY SEARCH          00021900
  END;                                           00022000
  IF SRCSEQ = LRANGE THEN % ALREADY HAVE THIS RECORD 00022100
  BEGIN LREC := LREC + 1; GO TO HAVESRCE; END;   00022200
  IF (EOFPTR - LREC) LSS 30 THEN GO TO READSRCE; % SKIP BINARY SEARCH 00022300
  REC := LREC + (EOFPTR - LREC) DIV 2; % START IN THE CENTER OF RANGE 00022400
  GO TO TESTREAD;                               00022500
  DO BEGIN                                       00022600
  IF LRANGE LSS SRCSEQ THEN % MOVE BACK, NOT LSS 0 00022700
  REC := (REC := REC - ADJ) * REAL(REC.[1:1] = 0) ELSE % MOVE UP 00022800
  IF REC := (LREC := REC) + ADJ GTR EOFPTR THEN REC := EOFPTR; 00022900
  TESTREAD:                                     00023000
  READ(SRCEFIL[REC], 14, B[*]);                 00023100
  SRCSEQ := INPCONV(B[9]);                      00023200
  IF SRCSEQ = LRANGE THEN % MATCHING RECORD     00023300
  BEGIN LREC := REC; READ(SRCEFIL); GO TO HAVESRCE; END; 00023400
  ADJ := (REC - LREC) DIV 2;                    00023500
  END UNTIL ADJ LEQ 1;                          00023600
  READ SEEK(SRCEFIL[LREC]); % NOT FOUND IN BINARY SEARCH, GO BACK 00023700
  END; % IF PARAMETERS SPECIFIED               00023800
  %.....                                       00023900
  READSRCE:                                     00024000
  %.....                                       00024100
  READ(SRCEFIL, 10, B[*])(EOF);                 00024200
  LREC := LREC + 1;                             00024300
  SRCSEQ := IF SFLG THEN INPCONV(B[9]) ELSE LREC; 00024400
  IF SEQCHK THEN                               00024500
  BEGIN                                          00024600
  IF SRCSEQ LSS LRANGE THEN GO TO READSRCE; % TOO LOW 00024700
  IF SRCSEQ GTR HRANGE THEN % TOO HIGH         00024800
  IF SEQCHK := PC LSS NPARAMS THEN GO NEXTPARAM ELSE GO EOF; 00024900
  END; % IF SEQCHK                             00025000
  %.....                                       00025100
  HAVESRCE:                                     00025200
  %.....                                       00025300
  OUTSEQ := IF MAKTAB AND NOT SFLG THEN INPCONV(B[9]) ELSE SRCSEQ; 00025400
  IF RESEQ THEN % RESEQUENCE THE FILE          00025500
  IF OK OR SRCSEQ GEQ STRRESEQ THEN            00025600
  IF RESEQ := OK := SRCSEQ LEQ ENDRESEQ THEN % RECORDS ARE IN RANGE 00025700
  BEGIN                                          00025800
  OUTSEQ := BASE := BASE + INCR; % CALCULATE NEW SEQ. NUMBER 00025900
  OUTCONV(B[9], OUTSEQ); % MOVE NUMBER TO RECORD 00026000
  END;                                          00026100
  IF MAKTAB THEN % CHECK SEQ. NUMBERS FIRST    00026200
  BEGIN                                          00026300
  IF OUTSEQ := OUTSEQ + 2 * REAL(OUTSEQ = 0) + WRKSEQ LEQ PREVSEQ THEN 00026400
  BEGIN                                          00026500

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IF NOT BRAAK THEN ERROR(PREVSEQ,OUTSEQ); * TELL THE USER
OUTSEQ := PREVSEQ + 2; * ADJUST SEQUENCE NUMBER
END;
OUTCONV(B[9],OUTSEQ);
PREVSEQ := OUTSEQ;
IF NPTR := NPTR + 1 GTR 29 THEN * SEGMENT IS FILLED
BEGIN
WRITE(NEWTAB,30,N[*]);
NPTR:=0;
END;
N[NPTR] := 0 & (NCT:=NCT+1)[4:32:16] & OUTSEQ[21:21:27];
END; * IF MAKTAB
WRITE(OUTFIL,10,B[*]);
NAP := NAP + 1; * NUMBER OF RECORDS APPENDED
GO TO READSRCE;
%....
EOF;
%....
IF MAKTAB THEN
BEGIN
IF NPTR:=NPTR+1 GTR 29 THEN
BEGIN
WRITE(NEWTAB,30,N[*]);
NPTR:=0;
END;
N[NPTR]:=EOFMARK;
WRITE(NEWTAB,30,N[*]);
READ(NEWTAB[0],30,N[*]);
N[0]:=NCT; * EOF POINTER
WRITE(NEWTAB[0],30,N[*]);
LOCK(NEWTAB,*);
END;
CLOSE(SRCEFIL); LOCK(OUTFIL,*);
IF NOT SUPPRESS THEN
BEGIN INFORMUSER(A,NAP,OUTSEQ); TFXOUT(A[0],56,1); END;
COMMON := NAP;
END PROGRAM.
END;END. LAST CARD ON OCRDING TAPE
DEFINE INTABLE[INTABLE1,INTABLE2]=UV3[INTABLE1,12,INTABLE2]#,

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LABEL 000000000PRINTER00175100CC EX OBJECT/READ;FILE SOURCEFILE=SYMBOL/APPEND;END+

OBJECT /READ

Data Document

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