

```

                                source.txt
COPY      START    1000      COPY FILE FROM INPUT TO OUTPUT
FIRST     STL      RETADR    SAVE RETURN ADDRESS
CLOOP     JSUB     RDREC     READ INPUT RECORD
                                LENGTH      TEST FOR EOF (LENGTH = 0)
                                COMP      ZERO
                                JEQ      ENDFIL      EXIT IF EOF FOUND
                                JSUB     WRREC      WRITE OUTPUT RECORD
                                J        CLOOP      LOOP
ENDFIL    LDA      EOF      INSERT END OF FILE MARKER
                                STA      BUFFER
                                LDA      THREE      SET LENGTH = 3
                                STA      LENGTH
                                JSUB     WRREC      WRITE EOF
                                LDL      RETADR      GET RETURN ADDRESS
                                RSUB      RETURN TO CALLER
EOF        BYTE    X'F1'
THREE     WORD     3
ZERO      WORD     0
RETADR    RESW     1
LENGTH    RESW     2      LENGTH OF RECORD
BUFFER    RESB     4096    4096-BYTE BUFFER AREA
.
.      SUBROUTINE TO READ RECORD INTO BUFFER
.
RDREC     LDX      ZERO      CLEAR LOOP COUNTER
                                LDA      ZERO      CLEAR A TO ZERO
RLOOP     TD       INPUT     TEST INPUT DEVICE
                                JEQ      RLOOP      LOOP UNTIL READY
                                RD        INPUT     READ CHARACTER INTO REGISTAR A
                                COMP     ZERO      TEST FOR END OF RECORD (X'00')
                                JEQ      EXIT      EXIT LOOP IF EOF
                                STCH     BUFFER,X    STORE CHARCTER IN BUFFER
                                TIX      MAXLEN      LOOP UNLESS MAX LENGTH
                                JLT      RLOOP      HAS BEEN REACHED
EXIT      STX      LENGTH    SAVE RECORD LENGTH
                                RSUB      RETURN TO CALLER
INPUT     BYTE     Y'F1'     CODE FOR INPUT DEVICE
MAXLEN    WORD     4096
.
.      SUBROUTINE TO WRITE RECORD FROM BUFFER
.
WRREC     LDX      ZERO      CLEAR LOOP COUNTER
WLOOP     TD       OUTPUT    TEST OUTPUT DEVICE
                                JEQ      WLOOP      LOOP UNTIL READY
                                LDCH     BUFFER,X    GET CHARCTER FROM BUFFER
                                WD        OUTPUT     WRITE CHARACTER
                                TIX      LENGTH      LOOP UNTIL ALL CHARACTERS
                                JLT      WLOOP      HAVE BEEN WRITTEN

```

```
source.txt
RETURN TO CALLER
CODE FOR OUTPUT DEVICE

OUTPUT  BYTE  RSUB
          X'05'
          END    FIRST
```