

| Line | Source statement | | | |
|------|------------------|--------|------------------------|--|
| 5 | COPY | START | 0 | COPY FILE FROM INPUT TO OUTPUT |
| 6 | | EXTDEF | BUFFER, BUFEND, LENGTH | |
| 7 | | EXTREF | RDREC, WRREC | |
| 10 | FIRST | STL | RETADR | SAVE RETURN ADDRESS |
| 15 | CLOOP | +JSUB | RDREC | READ INPUT RECORD |
| 20 | | LDA | LENGTH | TEST FOR EOF (LENGTH = 0) |
| 25 | | COMP | #0 | |
| 30 | | JEQ | ENDFIL | EXIT IF EOF FOUND |
| 35 | | +JSUB | WRREC | WRITE OUTPUT RECORD |
| 40 | | J | CLOOP | LOOP |
| 45 | ENDFIL | LDA | =C'EOF' | INSERT END OF FILE MARKER |
| 50 | | STA | BUFFER | |
| 55 | | LDA | #3 | SET LENGTH = 3 |
| 60 | | STA | LENGTH | |
| 65 | | +JSUB | WRREC | WRITE EOF |
| 70 | | J | @RETADR | RETURN TO CALLER |
| 95 | RETADR | RESW | 1 | |
| 100 | LENGTH | RESW | 1 | LENGTH OF RECORD |
| 103 | | LTORG | | |
| 105 | BUFFER | RESB | 4096 | 4096-BYTE BUFFER AREA |
| 106 | BUFEND | EQU | * | |
| 107 | MAXLEN | EQU | BUFEND-BUFFER | |
| 109 | RDREC | CSECT | | |
| 110 | . | | | |
| 115 | . | | | SUBROUTINE TO READ RECORD INTO BUFFER |
| 120 | . | | | |
| 122 | | EXTREF | BUFFER, LENGTH, BUFEND | |
| 125 | | CLEAR | X | CLEAR LOOP COUNTER |
| 130 | | CLEAR | A | CLEAR A TO ZERO |
| 132 | | CLEAR | S | CLEAR S TO ZERO |
| 133 | | LDT | MAXLEN | |
| 135 | RLOOP | TD | INPUT | TEST INPUT DEVICE |
| 140 | | JEQ | RLOOP | LOOP UNTIL READY |
| 145 | | RD | INPUT | READ CHARACTER INTO REGISTER A |
| 150 | | COMPR | A, S | TEST FOR END OF RECORD (X'00') |
| 155 | | JEQ | EXIT | EXIT LOOP IF EOR |
| 160 | | +STCH | BUFFER, X | STORE CHARACTER IN BUFFER |
| 165 | | TLXR | T | LOOP UNLESS MAX LENGTH |
| 170 | | JLT | RLOOP | HAS BEEN REACHED |
| 175 | EXIT | +STX | LENGTH | SAVE RECORD LENGTH |
| 180 | | RSUB | | RETURN TO CALLER |
| 185 | INPUT | BYTE | X'F1' | CODE FOR INPUT DEVICE |
| 190 | MAXLEN | WORD | BUFEND-BUFFER | |
| 193 | WRREC | CSECT | | |
| 195 | . | | | |
| 200 | . | | | SUBROUTINE TO WRITE RECORD FROM BUFFER |
| 205 | . | | | |
| 207 | | EXTREF | LENGTH, BUFFER | |
| 210 | | CLEAR | X | CLEAR LOOP COUNTER |
| 212 | | +LDT | LENGTH | |
| 215 | WLOOP | TD | =X'05' | TEST OUTPUT DEVICE |
| 220 | | JEQ | WLOOP | LOOP UNTIL READY |
| 225 | | +LDCH | BUFFER, X | GET CHARACTER FROM BUFFER |
| 230 | | WD | =X'05' | WRITE CHARACTER |
| 235 | | TLXR | T | LOOP UNTIL ALL CHARACTERS |
| 240 | | JLT | WLOOP | HAVE BEEN WRITTEN |
| 245 | | RSUB | | RETURN TO CALLER |
| 255 | | END | FIRST | |