

시스템프로그래밍 (2020년도) HW #9 Macro

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Fig 4.1 ==> Fig 4.2

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5 COPY START 0 COPY FILE FROM INPUT TO OUTPUT
10 RDBUFF MACRO &INDEV, &BUFADR, &RECLTH
15 .
20 . MACRO TO READ RECORD INTO BUFFER
25 .
30 CLEAR X CLEAR LOOP COUNTER
35 CLEAR A
40 CLEAR S
45 +LDT #4096 SET MAXIMUM RECORD LENGTH
50 TD =X'&INDEV' TEST INPUT DEVICE
55 JEQ *-3 LOOP UNTIL READY
60 RD =X'&INDEV' READ CHARACTER INTO REG A
65 COMPR A, S TEST FOR END OF RECORD
70 JEQ *+11 EXIT LOOP IF EOR
75 STCH &BUFADR, X STORE CHARACTER IN BUFFER
80 TIXR T LOOP UNLESS MAXIMUM LENGTH
85 JLT *-19 HAS BEEN REACHED
90 STX &RECLTH SAVE RECORD LENGTH
95 MEND
100 WRBUFF MACRO &OUTDEV, &BUFADR, &RECLTH
105 .
110 . MACRO TO WRITE RECORD FROM BUFFER
115 .
120 CLEAR X CLEAR LOOP COUNTER
125 LDT &RECLTH
130 LDCH &BUFADR, X GET CHARACTER FROM BUFFER
135 TD =X'&OUTDEV' TEST OUTPUT DEVICE
140 JEQ *-3 LOOP UNTIL READY
145 WD =X'&OUTDEV' READ CHARACTER INTO REG A
150 TIXR T LOOP UNTIL ALL CHARACTERS
155 JLT *-14 HAS BEEN WRITTEN
160 MEND
165 .
170 . MAIN PROGRAM
175 .
180 FIRST STL RETADR SAVE RETURN ADDRESS
190 CLOOP RDBUFF F1, BUFFER, LENGTH READ RECORD INTO BUFFER
195 LDA LENGTH TEST FOR END OF FILE
200 COMP #0
205 JEQ ENDFIL EXIT IF EOF FOUND
210 WRBUFF 05, BUFFER, LENGTH WRITE OUTPUT RECORD
215 J CLOOP LOOP
220 ENDFIL WRBUFF 05, EOF, THREE INSERT EOF MARKER
225 J @RETADR
230 EOF BYTE C'EOF'
235 THREE WIRD 3
240 RETADR RESW 1
245 LENGTH RESW 1 LENGTH OF RECORD
250 BUFFER RESB 4096 4096-BYTE BUFFER AREA
255 END FIRST

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시스템프로그래밍 (2020년도) HW #9 Macro (제출용)

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(Comments는 필요없어요!!)

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5 COPY START 0
10 FIRST STL RETADR
10a CLOOP RDBUFF F1, BUFFER, LENGTH
10b CLOOP CLEAR X
10c CLEAR A
10d +LDT #4096
10e TD =X'F1'
10f JEQ *-3
10g RD =X'F1'
10h COMPR A, S
10i JEQ *+11
10j STCH BUFFER, X
10k TIXR T
10l JLT *-19
10m STX LENGTH
195 LDA LENGTH
200 COMP #0
205 JEQ ENDFIL
210 WRBUFF 05, BUFFER, LENGTH
210a CLEAR X
210b LDA LENGTH
210c LDCH BUFFER, X
210d TD =X'05'
210e JEQ *-3
210f WD =X'05'
210g TIXR T
210h JLT *-14
215 J CLOOP
220 ENDFIL WRBUFF 05, EOF, THREE
220a CLEAR X
220b LDT THREE
220c LDCH EOF, X
220d TD =X'05'
220e JEQ *-3
220f WD =X'05'
220g TIXR T
220h JLT *-14
225 J @RETADR
230 EOF BYTE C'EOF'
235 THREE WORD 3
240 RETADR RESW 1
245 LENGTH RESW 1
250 BUFFER RESB 4096
255 END FIRST

```