1. **Place the number 3BH in internal RAM locations 30h to 32h**

CSEG AT 0

MOV A, #3BH

MOV 30H, A

MOV 31H, A

MOV 32H, A

END

(OR)

CSEG AT 0

MOV 30H,#3BH

MOV 31H,#3BH

MOV 32H,#3BH

END

1. **Copy the byte at internal RAM address 27H to external RAM address 27H**

CSEG AT 0

MOV DPTR, #27H

MOV 27H, #30H

MOV A,27H

MOVX @DPTR, A

END

1. **Set timer1 to A23DH.**

CSEG AT 0

MOV TL1, #3DH

MOV TH1, #A2H

END

(OR)

CSEG AT 0

MOV DPTR,#A23DH

MOVX TL1,@DPL

MOVX TH1,@DPH

1. **Copy the data in external RAM location 0123H to TL0 and data in external RAM location 0234H to TH0.**

CSEG AT 0

MOV DPTR, #0123H

MOVX A, @DPTR

MOV TL0, A

MOV DPTR, #0234H

MOVX A,@DPTR

MOV TH0, A

END

1. **Exchange the contents of B register and external RAM address 02CFH**

CSEG AT 0

MOV DPTR, #02CFH

MOVX A,@DPTR

MOV 20H,A

MOV B,#25H

MOV A, B

MOVX @DPTR,A

MOV B, 20H

END

1. **Copy the internal code byte at address 0300H to external RAM address 0300h.**

CSEG AT 0300H

AK: DB 20H

CSEG AT 0

MOV DPTR,#0300H

MOVC A, @A+DPTR

MOVX @DPTR, A

END

1. **Exchange both low nibbles of registers R0 and R1. Put the lower nibble of R0 in R1, and the low nibble of R1 is R0.**

CSEG AT 0

MOV R0, #35H

MOV R1, #45H

XCH A,R1

XCHD A, @R1

MOV R1, A

END

1. **Push the contents of the B register to TMOD**

CSEG AT 0

MOV B,#30H

PUSH 0F0H

POP 89H

END

(OR)

CSEG AT 0

MOV B, #30H

PUSH B

POP TMOD

END