



Fig 3.8 Main (Solution)



Main program

START: Move
Store
Clear
Store
Move
StoreByte
MoveControl
Or
MoveControl
MoveControl
Or
MoveControl
next instruction

R2, #LINE
R2, PNTR
R2
R2, EOL
R2, #2
R2, KBD_CONT
R2, IENABLE
R2, R2, #2
IENABLE, R2
R2, PS
R2, R2, #1
PS, R2

Initialize buffer pointer.

Clear end-of-line indicator.

Enable interrupts in 1. Indicate to other programs EOL the keyboard interface.

2. Why these EIls use different instructions?

Enable keyboard interrupts in the processor control register.

3. Why these two Writes to Control Registers use different instructions?

3. Local KBD is memory mapped so using Store while PS is a control register in CPU

2. a) KBD local using memory mapped I/O:
b) Or the other bits so as not to lose them in control R;EOL
c) Or the other bits so other interrupts remain EI/DI

0x4008



KBD_CONT

LINE: 1st Char



IENABLE



PS

