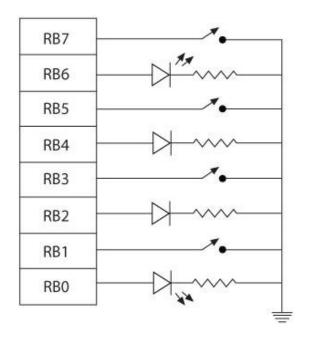
1. Given the switch and LED configuration below, write the assembly language instructions to properly initialize PORTB and then continuously read the input switches and turn ON the corresponding LEDs for the switches that are ON (grounded).

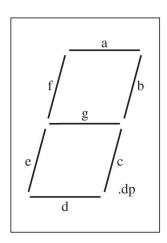


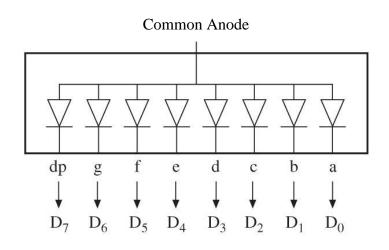
22,12,001,12									
B7	B6	B5	B4	B4	В3				
RBPU									

**INTCON2** 

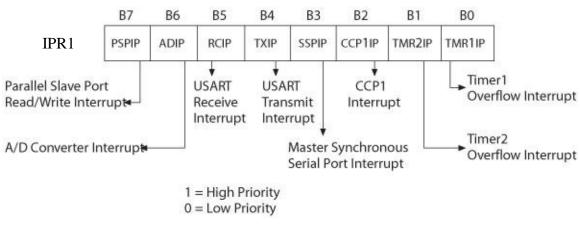
RBPU = PORTB pull-up resistor enable bit 0 = Pull-up resistors are enabled 1 = Pull-up resistors are disabled

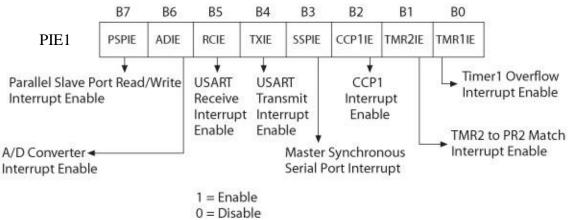
2. Given a common anode seven-segment display connected to PORTD below, write the assembly language instructions to initialize the port and flash the letter "C" every 100 ms. Assume the subroutine DELAY\_100ms is available.





3. Write assembly language instructions to enable the A/D Converter and Timer2 Overflow as high priority interrupts. Also, write instructions to identify the interrupt source and vector the MPU to the appropriate ISR.





	B7	B6	B5	B4	В3	B2	B1	BO
PIR1	PSPIF <sup>(1)</sup>	ADIF	RCIF	TXIF	SSPIF	CCP1IF	TMR2IF	TMR1IF