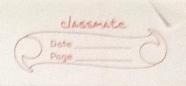## Assignment 4 - Writeup.

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1) Write a note on MPLAB IDE

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1) MPLAB is a proprietary freeware integrated development environment for the development of embedded applications on PIC & DSPIC microcontrollers and is developed by Microchip technology.

2) MPLAB x is the latest edition of MPLAB and is developed on the Net Beans platform.

3) MPLAB and MPLABx support project management, code editing, debugging and programming of microchip 8 bit PIC and AVR microcontrollers, as well as 32 bit SAM (ARM) and PIC 32 (MIPS) microcontrollers.

4) MPLABx supports automatic code generation with the MPLAB code configurator and MPLAB Harmony configurator plugins.

2) Write an assembly language provided program for PIC18 to multiply / divide two 8-bit numbers.

→

① Multiply 0x05 and 0x0A

    COUNT EQU 0x30

```
        MOVLW  0X05
        MOVLW  COUNT
        MOVLW  0

LOOP    ADDLW  0X0A
        DECFSZ COUNT, F
        GOTO LOOP
```

② Divide 0X0A by 0X02

    QUOTIENT EQU 0X30

```
        MOVLW 0X0A

LOOP    SUBLW  0X02
        INCF QUOTIENT, F
        BN LOOP

        DECF QUOTIENT, F
```