

Lab-5

Arithmetic Instructions of PIC Microcontroller

Objective:

In this lab students will learn

- How to manipulate arithmetic instructions for different applications?
- How to perform the addition of packed BCD numbers?
- How the division of numbers is performed in PIC microcontroller?

Theory

Different types of arithmetic instructions available in PIC are given as:

Addition

- ADDLW
- ADDWF
- ADDWFC

Subtraction

- SUBLW
- SUBWF
- SUBWFB
- SUBFWB

Multiplication

MULLW

Lab Exercise

Find C, Z and DC flags for each of the following:

[4]

(a)

```
MOVLW  0xFF
MOVWF  MYREG
BSF    STATUS, C
MOVLW  0
ADDWFC MYREG, F
```

(b)

