**Lab Report # 03**

**Course Title : Microprocessor Systems & Interfacing**

**Course Code : EEE342**

**Class : EPE 5A**

**Teacher’s Name : Muhammad Naveed Shaikh**

**Group # : 01**

**S. No Student Name Registration No**

**1**

**Mian Abdullah FA16-EPE-005**

**2**

**Osama Muneem FA16-EPE-007**

**3**

**Wahaj Khalid FA16-EPE-018**

**4**

**Umair Saifullah** **FA16-EPE-035**

**Type Total Marks Obtained Marks**

**Affective Psychomotor Cognitive**

**Department of Electrical and Computer Engineering**

**COMSATS University Islamabad, Abbottabad Campus**

Microprocessors System InterfacingLab Report-3

MPLAB CODE:

LIST P=PIC18F452, F=INHX32, N=0, ST=OFF, R=HEX

config OSC=HS, OSCS=OFF, WDT=OFF, BORV=45, PWRT=ON, BOR=ON, DEBUG=OFF, LVP=OFF, STVR=OFF

#INCLUDE<P18F452.INC>

ORG 00H

GOTO MAIN

ORG 08H

BTFSS INTCON,TMR0IF ; Timer0 interrupt ?

RETFIE

GOTO ISR

MAIN

ORG 200H

CLRF TRISD

MOVLW 0x68

MOVWF T0CON

MOVLW 0xFA

MOVWF TMR0L

MOVLW D'5';FOR COUNTER TO EXIT AFTET 5 PRESSES

MOVWF 06H

BCF INTCON,TMR0IF

BSF T0CON,7

BSF INTCON,TMR0IE

BSF INTCON,GIE

TOP

MOVFF TMR0L,09H ;TO COMPARE AND CHECK IF BUTTON IS PRESSED

TSTFSZ 06H ;TEST IF COUNTER IS ZERO

BRA LED ; IF NOT BLINK LED NUMBER OF TIMES BUTTON PRESSED

LP BRA LP

LED

MOVF 09H,W ;TO MAKE SURE COUNTER2 IS INCREMENTED AFTER BUTTON PRESS

STUCK2 CPFSEQ TMR0L

BRA LED2

BRA STUCK2

LED2

INCF 07H;COUNTER2

MOVFF 07H,PORTD

DECF 06H

BRA TOP

ISR

ORG 400H

SETF PORTD

BCF INTCON,TMR0IF

RETFIE

end

SCREENSHOTS:

