**EXPERIEMENT 1:**

/\* NAME:- Aniruddha Avhad.

ROLL NO:-01. SE-IT \*/

#include <stdio.h>

#include <stdlib.h>

#include <p18f4550.h>

void main (void){

int i,sum,n;

sum = 0;

sum = 0x0A + 0x04;

TRISD = 0;

PORTD = sum;

}

**EXPERIEMENT 2:**

/\* NAME:- Aniruddha Avhad.

ROLL NO:- 01. SE-IT. \*/

#include <stdio.h>

#include <stdlib.h>

#include <p18f4550.h>

void main(void){

int i,sum,n;

int number[] = {1,4,6};

sum = 0;

for(i=0; i<=14; i++){

sum = sum+number[i];

}

TRISD = 0;

PORTD = sum;

}  
  
**EXPERIMENT 3:**

// NMAE:- Aniruddha Avhad.

// ROLL NO:- 01. SE-IT.

#include <stdio.h>

#include <stdlib.h>

#include <p18f4550.h>

void main (void){

int mul,div;

mul = 0;

div = 0;

mul = 0x04 \* 0x02;

div = 0x08 / 0x04;

TRISD = 0;

TRISC = 0;

PORTD = mul;

PORTC = div;

}

**EXPERIEMENT: BUZZER**

#include<p18f4520.h>

#pragma config OSC=HS

#pragma config PWRT=OFF

#pragma config WDT=OFF

#pragma config DEBUG=OFF, LVP=OFF

void msdelay(unsigned int itime);

void Right(void);

void Left(void);

#define SW2 PORTBbits.RB0

#define SW1 PORTBbits.RB1

#define relay PORTBbits.RB3

#define buzzer PORTBbits.RB2

#define D1 PORTBbits.RB4

#define D2 PORTBbits.RB5

#define D3 PORTBbits.RB6

#define D4 PORTBbits.RB7

void main(){

ADCON1=0x0F;

TRISBbits.TRISB0=1;

TRISBbits.TRISB1=1;

TRISBbits.TRISB2=0;

TRISBbits.TRISB3=0;

TRISBbits.TRISB4=0;

TRISBbits.TRISB5=0;

TRISBbits.TRISB6=0;

TRISBbits.TRISB7=0;

D1=D2=D3=D4=0;

SW1=SW2=1;

relay=0;

while(1){

if(SW2==0 & SW1==1){

relay=1;

buzzer=1;

Right();

}

if(SW1==0 & SW2==1){

relay=0;

buzzer=0;

Left();

}

}

}

void Right(void){

D1=D2=D3=D4=0;

while(SW1 != 0){

relay=1;

buzzer=1;

D1=1;D2=0;D3=0;D4=0;

msdelay(10);

D1=0;D2=1;D3=0;D4=0;

msdelay(10);

D1=0;D2=0;D3=1;D4=0;

msdelay(10);

D1=0;D2=0;D3=0;D4=1;

msdelay(10);

}

}

void Left(void){

D1=D2=D3=D4=0;

while(SW2 != 0){

relay=0;

buzzer=0;

D1=0;D2=0;D3=0;D4=1;

msdelay(10);

D1=0;D2=0;D3=1;D4=0;

msdelay(10);

D1=0;D2=1;D3=0;D4=0;

msdelay(10);

D1=1;D2=0;D3=0;D4=0;

msdelay(10);

}

}

void msdelay(unsigned int itime){

int i,j;

for(i=0; i<itime; i++)

for(j=0; j<1275; j++);

}

**EXPERIMENT LED BLINKING:**

#include<P18F4550.h>

void Delay\_ms(int ms);

void main()

{

TRISB = 0x00;

while(1)

{

PORTB = 0xFF;

Delay\_ms(100);

PORTB = 0x00;

Delay\_ms(100);

}

}

void Delay\_ms(int ms)

{

int i,count;

for(i=0;i<ms;i++)

{

count = 98;

while(count != 1)

{

count--;

}

}

}

**EXPERIMENT LCD INTERFACING:**

#include<p18f4550.h>

#pragma config FOSC = HS

#pragma config WDT = OFF

#pragma config LVP = OFF

#pragma config PBADEN = OFF

#define LCD\_DATA PORTD

#define ctrl PORTE

#define rs PORTEbits.RE0

#define rw PORTEbits.RE1

#define en PORTEbits.RE2

void init\_LCD(void);

void LCD\_command(unsigned char cmd);

void LCD\_data(unsigned char data);

void LCD\_write\_string(static char \*str);

void msdelay(unsigned int time);

void main(void)

{

char var1[]="wel-come";

char var2[]="SE IT DEPARTMENT";

ADCON1=0X0F;

TRISD=0X00;

TRISE=0X00;

init\_LCD();

msdelay(50);

LCD\_command(0x0C0);

LCD\_write\_string(var1);

LCD\_write\_string(var2);

while(1);

}

void msdelay(unsigned int time)

{

unsigned int i,j;

for(i=0;i<time;i++);

for(j=0;j<710;j++);

}

void init\_LCD(void)

{

LCD\_command(0x38);

msdelay(15);

LCD\_command(0x01);

msdelay(15);

LCD\_command(0x0C);

msdelay(15);

LCD\_command(0x80);

msdelay(15);

}

void LCD\_command (unsigned char cmd)

{

LCD\_DATA=cmd;

rs=0;

rw=0;

en=1;

msdelay(15);

en=0;

}

void LCD\_data (unsigned char data)

{

LCD\_DATA=data;

rs=1;

rw=0;

en=1;

msdelay(15);

en=0;

}

void LCD\_write\_string(static char\*str)

{int i=0;

while(str[i]!=0)

{

LCD\_data(str[i]);

msdelay(15);

i++;

}

}