// Addition

#include<stdio.h>

#include<P18F4550.h>

void main(void){

int sum;

sum = 0;

sum = 0x0A + 0x02;

TRISD=0;

PORTD=sum;

}

//Buzzer

#include<P18F4550.h>

void Delay\_Ms(unsigned int);

void main()

{

TRISE=0;

ADCON1=0X07;

while(1)

{

PORTE=1;

Delay\_Ms(500);

PORTE=0;

Delay\_Ms(500);

}

}

void Delay\_Ms(unsigned int ms)

{

int i,count;

for(i=1;i<=ms;i++)

{

count=498;

while(count!=1)

{

count--;

}

}

}

// LCD intefacing

#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++;

}

}

//Led blink

#include <stdio.h>

#include <P18F4580.h>

void ToDelay(void);

#define mybit PORTBbits.RB4

void main(void)

{

TRISBbits.TRISB4 =0;

while(1)

{

mybit = 1;

ToDelay();

mybit = 0;

ToDelay();

}

}

void ToDelay(void)

{

T0CON = 0x01;

TMR0H = 0xFF;

TMR0L = 0x00;

T0CONbits.TMR0ON = 1;

while(INTCONbits.TMR0IF == 0);

T0CONbits.TMR0ON = 0;

INTCONbits.TMR0IF = 0;

}

//LED BLINKING

#include<P18F4550.h>

void Delay\_ms(int ms);

void main()

{

TRISB = 0X00;

while(1)

{

PORTB = 0XFF;

Delay\_ms(500);

PORTB = 0X00;

Delay\_ms(500);

}

}

void Delay\_ms(int ms)

{

int i,count;

for(i=1; i<=ms; i++)

{

count = 498;

while(count!=1)

{

count--;

}

}

}

// Multiply and Divide

#include<stdio.h>

#include<P18F4550.h>

void main( ){

int MUL, DIV;

MUL=0;

DIV=0;

MUL = 0X04 \* 0X02;

DIV = 0X06 / 0X02;

TRISD = 0;

PORTD = MUL;

TRISC = 0;

PORTC = DIV;

}

// PC to PC

#include<stdio.h>

#include<p18f4520.h>

int I;

unsigned char RX\_DATA, TX\_DATA;

void init\_serial()

{

SSPCON1=0;

TRISCbits.TRISC7=1;

TRISCbits.TRISC6=0;

SPBRG=0x1E;

TXSTA=0x20;

RCSTA=0x90;

void receive()

{while(PIR1bits.PCIF==0); RX\_DATA= RCPEG;}

void send()

{while(TXSTAbits.TRMT==0); TXREG=RX\_DATA;}

void main()

{ init\_serial();

while(1)

{

receive();

send();

}

}

}

//Serial pc to pc

#include<stdio.h>

#include<p18f4520.h>

int I;

unsigned char RX\_DATA, TX\_DATA;

void init\_serial()

{

SSPCON1=0;

TRISCbits.TRISC7=1;

TRISCbits.TRISC6=0;

SPBRG=0x1E;

TXSTA=0x20;

RCSTA=0x90;

void receive()

{while(PIR1bits.PCIF==0); RX\_DATA= RCPEG;}

void send()

{while(TXSTAbits.TRMT==0); TXREG=RX\_DATA;}

void main()

{ init\_serial();

while(1)

{

Receive();

Send();

}

}

}

// Sorting ascending descending

#include<stdio.h>

#include<P18F4550.h>

void main(void)

{

int i,j,key,temp;

int arr[]={4,1,3,55,20};

TRISD=0;

for(i=1;i<5;i++) //counter

{

for(j=0;j<5-i;j++) // indexing

{

if(arr[j]>arr[j+1])

{

temp=arr[j];

arr[j]=arr[j+1];

arr[j+1]=temp;

}

}

}

for(i=0;i<5;i++){

PORTD=arr[i];

}

}

// SUM of array

#include<stdio.h>

#include<P18F4550.h>

void main(){

int i, sum;

int number[]= {1,2,3,4,5,6,7,8,9,10};

sum = 0;

for(i=0;i<=9;i++)

{

sum = sum + number[i];

}

TRISD = 0;

PORTD = sum;

}

// Switch on off relay

#include<P18F4550.h>

void main()

{

unsigned char key=0;

TRISDbits.TRISD0=1; // D0 pin configure as input

TRISDbits.TRISD1=1;// D1 pin configure as input

if(TRISDbits.RD0==0) // 1 if switch 1 pressed

key=0;

if(TRISDbits.RD1==0)// 1 if switch 2 pressed

key=1;

}

// transfer element from source to destination

#include<stdlib.h>

#include<P18F4550.h>

void main(void)

{

int i;

int source1[]={0x21,0x22,0x23,0x24,0x25};

int dest[]={0x00,0x00,0x00,0x00};

for(i=0;i<=4;i++)

{

dest[i] = source1[i];

}

TRISB=0;

PORTB=dest[i];

}