**SOURCE CODE**

#include<reg51.h>

#include<string.h>

unsigned convert (unsigned int);

#define lcd\_data P2

sbit lcd\_rs = P2^0;

sbit lcd\_en = P2^1;

sbit rcg = P1^0;

sbit r = P1^4;

sbit o = P1^5;

sbit g = P1^7;

void delay(unsigned int v)

{

unsigned int i,j;

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

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

}

void lcdcmd(unsigned char value) // LCD COMMAND

{

lcd\_data=value&(0xf0); //send msb 4 bits

lcd\_rs=0; //select command register

lcd\_en=1; //enable the lcd to execute command

delay(3);

lcd\_en=0;

lcd\_data=((value<<4)&(0xf0)); //send lsb 4 bits

lcd\_rs=0; //select command register

lcd\_en=1; //enable the lcd to execute command

delay(3);

lcd\_en=0;

}

void lcd\_init(void)

{

lcdcmd(0x02);

lcdcmd(0x02);

lcdcmd(0x28); //intialise the lcd in 4 bit mode

lcdcmd(0x28); //intialise the lcd in 4 bit mode

lcdcmd(0x0e); //cursor blinking

lcdcmd(0x06); //move the cursor to right side

lcdcmd(0x01); //clear the lcd

}

void lcddata(unsigned char value)

{

lcd\_data=value&(0xf0); //send msb 4 bits

lcd\_rs=1; //select data register

lcd\_en=1; //enable the lcd to execute data

delay(3);

lcd\_en=0;

lcd\_data=((value<<4)&(0xf0)); //send lsb 4 bits

lcd\_rs=1; //select data register

lcd\_en=1; //enable the lcd to execute data

delay(3);

lcd\_en=0;

delay(3);

}

void msgdisplay(unsigned char b[]) // send string to lcd

{

unsigned char s,count=0;

for(s=0;b[s]!='\0';s++)

{

count++;

if(s==16)

lcdcmd(0xc0);

if(s==32)

{

lcdcmd(1);

count=0;

}

lcddata(b[s]);

}

}

void tx(unsigned char \*tx)

{

for(;\*tx != '\0';tx++)

{

SBUF=\*tx;

while(TI == 0);

TI=0;

}

}

void tx1(unsigned char tx)

SBUF=tx;

while(TI == 0);

TI=0;

}

unsigned char receive()

{

unsigned char rx;

while(RI == 0);

rx=SBUF;

RI=0;

return rx;

}

void main(void)

{

unsigned char count,str1[12];

r=o=g=0;

TMOD=0x20;

TH1=0xfd;//// 9600

SCON=0x50;

TR1=1;

lcd\_init();

msgdisplay("WIRELESS SYSTEM FOR TAFFIC SIGN IDENTIFICATION AND VIOLIATION MONITORING");

tx("WIRELESS SYSTEM FOR TAFFIC SIGN IDENTIFICATION AND VIOLIATION MONITORING\r\n");

tx("AT\r\n");

delay(250);

tx("AT+CMGF=1\r\n");

delay(250);

tx("AT&W\r\n");

delay(250);

tx("AT+CNMI=1,2,0,0\r\n");

delay(250);

tx("AT+CMGS=\"9493610889\"\r\n");

tx("MODEM INITIALISED\r\n");

tx("AT+CMGS=\"77889954625\"\r\n");

tx("MODEM INITIALISED\r\n");

tx1(0x1A);

while(1)

{

loop:r=0;o=0;g=1;

if(rcg == 0)

{

r=1;o=0;g=0;

tx("WAITING FOR CARD\r\n");

for(count=0;count < 12;count++)

{

str1[count]= receive();

}

if((str1[8]=='7' && str1[9]=='3') || (str1[9]=='7' && str1[10]=='3') )

{

tx("AT+CMGS=\"9493610889\"\r\n");

tx("VECHILE NO : TS 00 AA 0000\r\n");

tx1(0x1A);

tx("SIGNAL JUMP\r\n");

tx1(0x1A);

tx("FINE 2000/-\r\n");

tx1(0x1A);

}

if((str1[8]=='8' && str1[9]=='4') || (str1[9]=='8' && str1[10]=='4') )

{

tx("AT+CMGS=\"7799885566\"\r\n");

tx("VECHILE NO : TS 22 AA 1243\r\n");

tx1(0x1A);

tx("SIGNAL JUMP \r\n");

tx1(0x1A);

tx("FINE 2000/-\r\n");

tx1(0x1A);

}

goto loop;

}

}

}