/\* Gas Sensor Interfacing with firebird v Robot using 8051 \*/

\* Done by SVIETIANS\*/

#include<reg51.h>

#define lcd P3

sbit GAS=P1^0;

sbit rs=P2^0; //register select

sbit rw=P2^1; //RW

sbit en=P2^2; //enable

void lcd\_init();

void cmd(unsigned char);

void dat(unsigned char);

void delay();

void lcd\_string(char \*s);

void main()

{

lcd\_init();

lcd\_string(" Welcome to New World ");

while(1)

{

if(GAS)

{

cmd(0xc0);

lcd\_string("Gas Detected");

delay();

}

else

{

cmd(0xc0);

lcd\_string("Gas Not Detected ");

}

}

}

void lcd\_init()

{

cmd(0x38);

cmd(0x0e);

cmd(0x06);

cmd(0x01);

cmd(0x80);

}

void cmd(unsigned char a)

{

lcd=a;

rs=0;

rw=0;

en=1;

delay();

en=0;

}

void dat(unsigned char b)

{

lcd=b;

rs=1;

rw=0;

en=1;

delay();

en=0;

}

void lcd\_string(char \*s)

{

while(\*s) {

dat(\*s++);

}

}

void delay()

{

unsigned int i;

for(i=0;i<20000;i++);

}