#include<reg51.h>

#define lcd P0

sbit rs=P2^0;

sbit e=P2^1;

sbit sw=P3^0;

sbit rst=P3^1;

unsigned int i=0;

void delay (int);

void display (unsigned char);

void cmd (unsigned char);

void string (char \*);

void init (void);

void int\_lcd(unsigned int);

void delay (int d)

{

unsigned char i=0;

for(;d>0;d--)

{

for(i=250;i>0;i--);

for(i=248;i>0;i--);

}

}

void cmd (unsigned char c)

{

lcd=c;

rs=0;

e=1;

delay(5);

e=0;

}

void display (unsigned char c)

{

lcd=c;

rs=1;

e=1;

delay(5);

e=0;

}

void string (char \*p)

{

while(\*p)

{

display(\*p++);

}

}

void init (void)

{

cmd(0x38);

cmd(0x0c);

cmd(0x01);

cmd(0x80);

}

void int\_lcd(unsigned int n)

{

char a[4]={0},i=0;

if(n==0)

{

display('0');

return;

}

else

{

while(n>0)

{

a[i++]=(n%10)+48;

n/=10;

}

for(--i;i>=0;i--)

{

display(a[i]);

}

}

}

void main()

{

sw=1;

rst=1;

init();

cmd(0x80);

string(" Random Number  ");

cmd(0xc0);

string("   Generator    ");

delay(2000);

cmd(0x01);

while(1)

{

cmd(0x80);

string("Press the button");

while(sw!=0)

{

i=++i;

if(i==100)

i=0;

}

cmd(0x80);

string("RAND NUM:       ");

cmd(0x8a);

int\_lcd(i);

while(rst!=0);

//cmd(0x01);

}

}