CODE [ags.asm] [KEIL]

```c
#include<reg51.h>

//Function declarations
void cct_init(void);

void delay(int);

void lcdinit(void);

void writecmd(int);

void writedata(char);

void ReturnHome(void);

// Defines Pins
sbit RS = P1^0;

sbit E  = P1^1;

sbit BLED = P1^5;

sbit GLED = P1^3;

sbit MOTOR = P1^7;

sbit RLED = P1^2;

// Main program
void main(void)
{
  cct_init();

  lcdinit();

  writecmd(0x81);

  writedata('A');

  writedata('u');

  writedata('t');
```

```
writedata('o');

writedata('m');

writedata('a');

writedata('t');

writedata('i');

writedata('c');

writedata(' ');

writedata('G');

writedata('a');

writedata('r');

writedata('d');

writedata('e');

writedata('n');

writedata('i');

writedata('n');

writedata('g');

writecmd(0xc4);


writedata('S');

writedata('y');

writedata('s');

writedata('t');

writedata('e');

writedata('m');

ReturnHome();
```

```c
void cct_init(void)
{
P0 = 0x00;

P1 = 0x00;

P2 = 0x00;

P3 = 0x00;

}
void delay(int a)
{
  int i;
  for(i=0;i<a;i++);
}
void writedata(char t)
{
        GLED=1;
        BLED=1;
        MOTOR=1;
        RLED=1;
        RS = 1;
        P2 = t;
        E = 1;
    delay(150);
    E  = 0;
    delay(150);
}
void writecmd(int z)
{
        GLED=1;
        BLED=1;
```

```c
            MOTOR=1;

            RLED=1;

            RS = 0;

            P2 = z;

            E = 1;

        delay(150);

        E  = 0;

        delay(150);

}
void lcdinit(void)

{

    delay(15000);

    writecmd(0x30);

    delay(4500);

    writecmd(0x30);

    delay(300);

    writecmd(0x30);

    delay(650);

    writecmd(0x38);

    writecmd(0x0c);

    writecmd(0x01);

    writecmd(0x06);

}
void ReturnHome(void)

{

    writecmd(0x02);

    delay(1500);

}
```