

```

#include <LiquidCrystal.h>

LiquidCrystal lcd(12, 13, 11, 10, 9, 8);

int pirPin=7;
int pirInput=0;
int bulbPin=6;
int photoValue=0;
int tempReading=0,temp1=0,temperature=0;
int fanPin=5;
int gasReading=0;
int greenLed=4;
int yellowLed=3;
int redLed=2;
int piezoPin=0;

void scrollScreenSaver() {

    lcd.clear() ;
    lcd.setCursor(15, 0);
    lcd.print("Welcome");
    lcd.setCursor(15, 1);
    lcd.print("to my home");

    for (int positionCounter = 0; positionCounter < 22; positionCounter++) {
        lcd.scrollDisplayLeft();
        delay(50);
    }
}

void setup()
{
    lcd.begin(16, 2);
    lcd.print("hello, world!");

```

```
pinMode(pirPin, INPUT);  
pinMode(bulbPin, OUTPUT);  
pinMode(greenLed,OUTPUT);  
pinMode(yellowLed,OUTPUT);  
pinMode(redLed,OUTPUT);  
pinMode(piezoPin,OUTPUT);
```

```
Serial.begin(9600);
```

```
}
```

```
void loop()
```

```
{
```

```
  lcd.setCursor(0, 1);  
  lcd.print(millis() / 1000);  
  pirInput=digitalRead(pirPin);  
  photoValue=analogRead(A0);  
  Serial.println(photoValue);  
  tempReading=analogRead(A1);  
  temperature=(5000.0/1024.0*tempReading/10.0);  
  Serial.println(temperature);
```

```
  gasReading=analogRead(A2);  
  Serial.println(gasReading);  
  Serial.println(" .....");  
  digitalWrite(greenLed,gasReading>100 ? HIGH : LOW);  
  digitalWrite(yellowLed,gasReading>200 ? HIGH : LOW);  
  digitalWrite(redLed,gasReading>300 ? HIGH : LOW);
```

```
  if(pirInput==HIGH)
```

```

{
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("Motion Detected");
    if(photoValue<300)
    {
        digitalWrite(bulbPin,HIGH);
        lcd.setCursor(0,1);
        lcd.print("Light is on");
        delay(1000);
    }
    if(temperature>25)
    {
        digitalWrite(fanPin,HIGH);
        lcd.setCursor(0,1);
        lcd.print("          ");
        lcd.setCursor(0,1);
        lcd.print("Fan is on");
        delay(1000);
    }

}

else
{
    scrollScreenSaver() ;
}

/*digitalWrite(13, HIGH);
delay(1000);
digitalWrite(13, LOW);
delay(1000);
}

```