```
// library for the LCD display:

#include <LiquidCrystal.h>



Int ledPin = 11;

Int PIRpin = 8;

Int pirState = LOW;

Int val = 0;

// photocell circuit

Int photocellPin = 0;

Int photocellReading;



LiquidCrystal lcd(2, 3, 4, 5, 6, 7);



Void setup() {
```

```
pinMode(ledPin, OUTPUT);

pinMode(PIRpin, INPUT);

pinMode(photocellPin, INPUT);



Serial.begin(9600);

Lcd.begin(16, 2);

Lcd.setCursor(2, 0);

Lcd.print("P.I.R Motion ");

Lcd.setCursor(0, 1);

Lcd.print("and Light Sensors");

Delay(2000); // wait 2s



        Delay(2000);
```

```
            Lcd.clear();

            Lcd.setCursor(0, 0);

    Lcd.print("Processing Data.");

    Delay(3000);

    Lcd.clear();

            Lcd.setCursor(3, 0);

            Lcd.print("No Motion ");

            Lcd.setCursor(3, 1);

            Lcd.print("Waiting !");



}



Void loop(){

  Val = digitalRead(PIRpin);

  photocellReading = analogRead(photocellPin);
```

```
if (val == HIGH) {

  digitalWrite(ledPin, HIGH);

  delay(150);



                    if (pirState == LOW) {

                      Serial.println("Motion detected!");

                      Lcd.clear() ;

                      Lcd.setCursor(0, 0);

                      Lcd.print("Motion Detected!");

                      Lcd.setCursor(0, 1);

                      Lcd.print(photocellReading);

                      // We only want to print on the output change, not state

                      pirState = HIGH;
```

```
        delay(5000) ;

                    }

  } else {

    digitalWrite(ledPin, LOW);



          // display no motion screen saver

          scrollScreenSaver() ;

    if (pirState == HIGH){

                    // There's no motion !



                    // change to no motion detected

                    pirState = LOW;

    }

  }

}
```

```
Void scrollScreenSaver() {

        Lcd.clear() ;

        Lcd.setCursor(15, 0);

        Lcd.print(“No Motion “);

        Lcd.setCursor(15, 1);

        Lcd.print(“Waiting !”);

   For (int positionCounter = 0; positionCounter < 22; positionCounter++) {

                // scroll one position left:
```

```
                Lcd.scrollDisplayLeft();

                // wait a bit:

                Delay(150);



        }

}
```