**SMART STREET LIGHT SYSTEM**

**Code:**

**int** led = 11;

**int** led1 = 10;

**int** led2 = 9;

**int** led3 = 6;

**int** led4 = 5;

**int** ldr = A2; // LDR pin connected to Analog pin "A2"

**int** x1, x2, x3, x4,x5;

**void** setup()

{

Serial.begin (9600);

// initialize LED pins as an output

pinMode (led,OUTPUT);

pinMode (led1,OUTPUT);

pinMode (led2,OUTPUT);

pinMode (led3,OUTPUT);

pinMode (led4,OUTPUT);

// initialize LED Pin as an input

pinMode (ldr,INPUT);

}

**void** loop()

{

**int** ldrStatus = analogRead (ldr); // Read LDR output value

Serial.println (ldrStatus);

delay(1);

**if** (ldrStatus <=100)

{

// IR Sensor 1 CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**if** (digitalRead(2)== 0) // Read IR Senso 1 value

{

x1=0;

x2=1;

digitalWrite(led,HIGH);

digitalWrite(led1,HIGH);

delay(100);// micro second

}

**else**

{

**if**(x1==0)

{

digitalWrite(led,HIGH);

analogWrite(led,255/6);

delay(50);

}

**if**(x2==1)

{

digitalWrite(led1,HIGH);

analogWrite(led1,255/6);

delay(50);

}

}

// IR Sensor 2 CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**if** (digitalRead(4)== 0) // Read IR Senso 2 value

{

x2=0;

x3=1;

digitalWrite(led1,HIGH);

digitalWrite(led2,HIGH);

delay(100);// micro second

}

**else**

{

**if**(x2==0)

{

digitalWrite(led1,HIGH);

analogWrite(led1,255/6);

delay(50);

}

**if**(x3==1)

{

digitalWrite(led2,HIGH);

analogWrite(led2,255/6);

delay(50);

}

}

// IR Sensor 3 CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**if** (digitalRead(7)== 0)// Read IR Senso 3 value

{

x3=0;

x4=1;

digitalWrite(led2,HIGH);

digitalWrite(led3,HIGH);

delay(100);// micro second

}

**else**

{

**if**(x3==0)

{

digitalWrite(led2,HIGH);

analogWrite(led2,255/6);

delay(50);

}

**if**(x4==1)

{

digitalWrite(led3,HIGH);

analogWrite(led3,255/6);

delay(50);

}

}

// IR Sensor 4 CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**if** (digitalRead(8)== 0) // Read IR Senso 4 value

{

x4=0;

x5=1;

digitalWrite(led3,HIGH);

digitalWrite(led4,HIGH);

delay(100);// micro second

}

**else**

{

**if**(x4==0)

{

digitalWrite(led3,HIGH);

analogWrite(led3,255/6);

delay(50);

}

**if**(x5==1)

{

digitalWrite(led4,HIGH);

analogWrite(led4,255/6);

delay(50);

}

}

}

**else**

{

digitalWrite(led, LOW);

digitalWrite(led1, LOW);

digitalWrite(led2, LOW);

digitalWrite(led3, LOW);

digitalWrite(led4, LOW);

}

}