

```
int red1    = 8;
```

```
int led2    = 2;
```

```
int led3    = 3;
```

```
int led4    = 4;
```

```
int lightSensorPin = A0;
```

```
int analogValue = 0;
```

```
void setup() {
```

```
    Serial.begin(9600);    //sets serial port for communication
```

```
    pinMode(red1,OUTPUT);
```

```
    pinMode(led2,OUTPUT);
```

```
    pinMode(led3,OUTPUT);
```

```
    pinMode(led4,OUTPUT);
```

```
}
```

```
void loop(){
```

```
    analogValue = analogRead(lightSensorPin);
```

```
    Serial.println(analogValue);
```

```
    if(analogValue < 40){
```

```
        digitalWrite(red1, HIGH);
```

```
        digitalWrite(led2, HIGH);
```

```
    }
```

```
    if(analogValue < 20){
```

```
        digitalWrite(red1, HIGH);
```

```
        digitalWrite(led2, HIGH);
```

```
digitalWrite(led3, HIGH);
```

```
digitalWrite(led4, HIGH);
```

```
}
```

```
delay(200);
```

```
digitalWrite(redLedPin, LOW);
```

```
digitalWrite(led2, LOW);
```

```
digitalWrite(led3, LOW);
```

```
digitalWrite(led4, LOW);
```

```
}
```