

◆ How the PIR Sensor Works

A PIR (Passive Infrared) sensor detects infrared radiation emitted by the human body.

When a person moves in front of the sensor, the change in infrared energy is detected and the sensor outputs a HIGH signal.

◆ What the Code Does

The Arduino reads the PIR sensor output from a digital pin.

When motion is detected, the code turns ON the alert LEDs and displays the sensor value on the Serial Monitor.

When no motion is detected, the LEDs are turned OFF.

```
int pir = 0;
```

```
void setup()
```

```
{  
  pinMode(5, INPUT);  
  Serial.begin(9600);  
  pinMode(12, OUTPUT);  
  pinMode(11, OUTPUT);  
  pinMode(10, OUTPUT);  
}
```

```
void loop()
```

```
{  
  pir = digitalRead(5);  
  Serial.println(pir);  
  if (pir == 1) {  
    digitalWrite(12, HIGH);  
    digitalWrite(11, LOW);  
    digitalWrite(10, HIGH);  
  } else {  
    digitalWrite(12, LOW);  
    digitalWrite(11, HIGH);  
    digitalWrite(10, LOW);  
  }  
  delay(10); // Delay a little bit to improve simulation performance  
}
```