

```
// Write an Arduino/Raspberry pi program for interfacing with PIR Sensor  
  
// PIR Sensor interfacing with Arduino  
  
int pirPin = 2; // PIR sensor output pin  
  
int ledPin = 13; // LED pin  
  
  
void setup() {  
  
    pinMode(pirPin, INPUT); // Set PIR pin as input  
  
    pinMode(ledPin, OUTPUT); // Set LED pin as output  
  
  
Serial.begin(9600); //Initialize serial communication for debugging  
}  
  
void loop() {  
  
    int motionState = digitalRead(pirPin); // Read PIR sensor state  
  
  
    if (motionState == HIGH) {  
  
        digitalWrite(ledPin, HIGH); // Turn on LED  
  
Serial.println("Motion detected!");  
  
        delay(1000); // Delay for one second  
  
    } else {  
  
        digitalWrite(ledPin, LOW); // Turn off LED  
  
Serial.println("No motion detected.");  
  
    }  
}
```