```
int led = 8;
int pir = 9;
int state = LOW;
int val = 0;
void setup() {
  pinMode(led, OUTPUT);
  pinMode(pir, INPUT);
  Serial.begin(9600);
}
void loop(){
  val = digitalRead(pir);
  if (val == HIGH) {
    digitalWrite(led, HIGH);
    delay(100);
    if (state == LOW) {
      Serial.println("Movement detected!");
      state = HIGH;
    }
  }
}
```

```
  else {
     digitalWrite(led, LOW);
     delay(200);

     if (state == HIGH){
       Serial.println("No movement!");
       state = LOW;
   }
  }
}
```