PROGRAM:

#include <Servo.h>

Servo myservo;

int potpin = 0;

int ledPin = 13;

int inputPin = 2;

int pirState = LOW;

int val = 0;

void setup() {

  myservo.attach(9);

   pinMode(ledPin, OUTPUT);

  pinMode(inputPin, INPUT);

**Serial**.begin(9600);

}

void loop()

{

  val = analogRead(potpin);

  val = map(val, 0, 1023, 0, 180);

  myservo.write(val);

  delay(15);

  val = digitalRead(inputPin);    if (val == HIGH)

  {                digitalWrite(ledPin, HIGH);      if (pirState == LOW)

    {

**Serial**.println("Motion detected!");

           pirState = HIGH;

    }

  } else

  {

    digitalWrite(ledPin, LOW);

    if (pirState == HIGH) {

**Serial**.println("Motion ended!");

           pirState = LOW;

    }

  }

}

PROGRAM OUTPUT



