

IOT ASSIGNMENT-1

SMART HOME IN WOKWI

PROGRAM:

```
#include <Servo.h>

Servo myservo;
int pos=0;
int ledPin=12;
int inputPin=2;
int pirState=LOW;
int val=0;
int buzzer = 10;

void setup() {
  pinMode(ledPin, OUTPUT);
  pinMode(inputPin, INPUT);
  myservo.attach(9);
  pinMode(buzzer, OUTPUT);
  Serial.begin(9600);

}

void loop() {
  val = digitalRead(inputPin);
  if (val == HIGH) {
    digitalWrite(ledPin, HIGH);
    tone(buzzer, 1000);
    if (pirState == LOW) {
      pirState = HIGH;
```

```
    Serial.println("Motion detected!");
    for (pos = 0; pos <= 180; pos += 1) {
myservo.write(pos);
delay(15);
}
for (pos = 180; pos >= 0; pos -= 1) {
    myservo.write(pos);
    delay(15);
}
} else {
    digitalWrite(ledPin, LOW);
    if (pirState == HIGH){
        pirState = LOW;
        Serial.println("Motion ended!");
    }
}
delay(1000);
noTone(buzzer);
delay(1000);
}
```

CONNECTIONS:

