

# **Assignment 1**

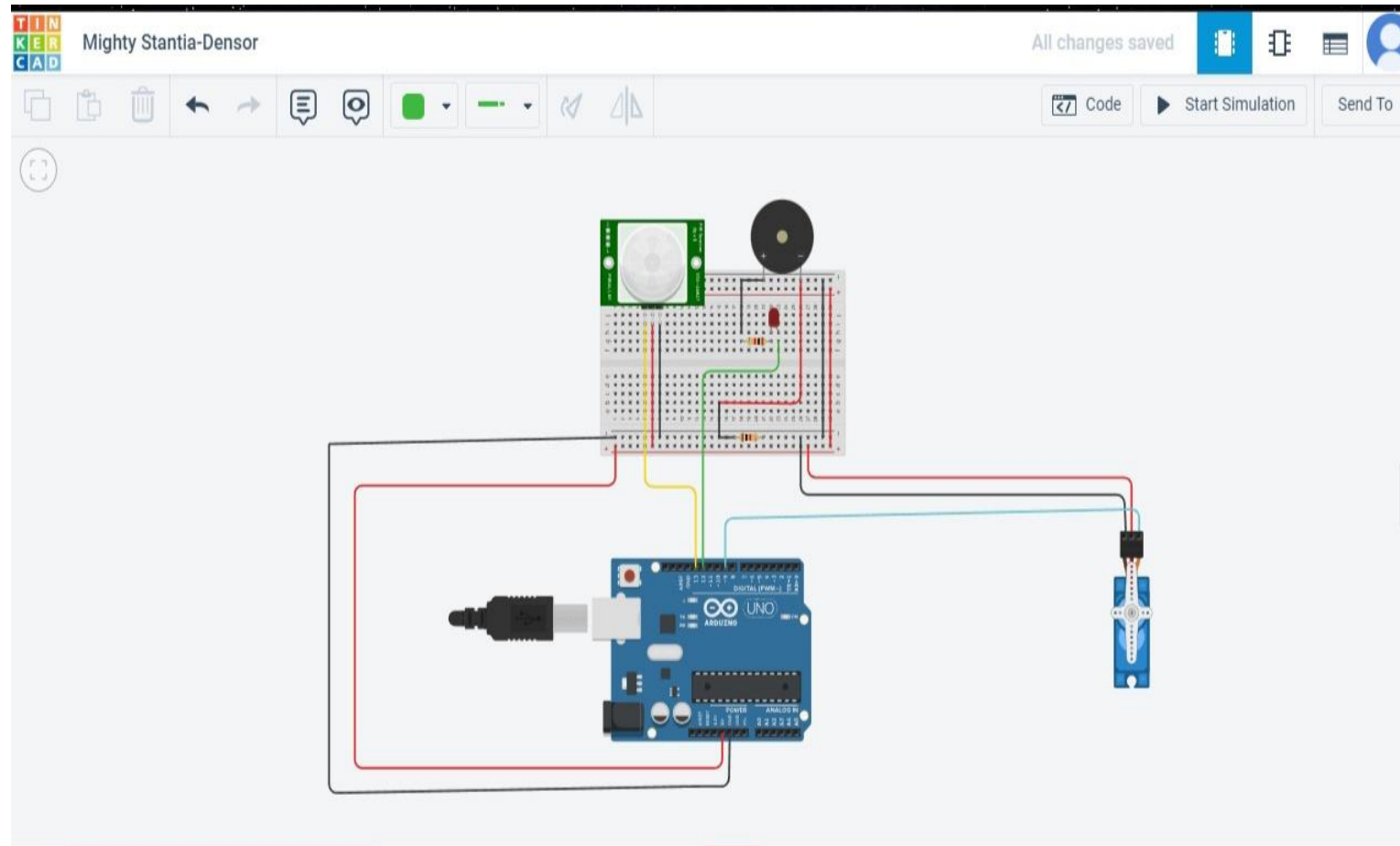
## **Aim:**

Build a Smart Home in Tinker card with LED, buzzer, two sensors.  
pir sensor for home security, servo motor for door lock system.

## **Apparatus Required :**

- Pir Sensor
- LED
- Buzzer
- Servo Motor
- Breadboard
- Resistor
- Arduino Uno R3

# Simulation :



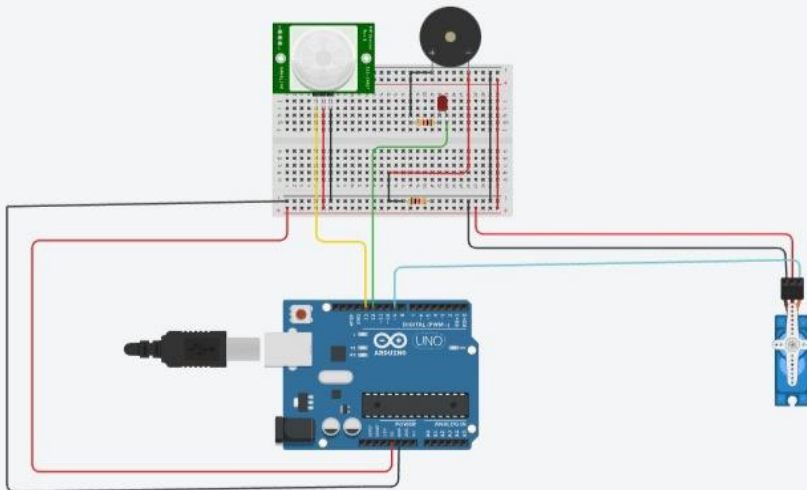
# PIR Sensor With Servo Motor:

TINKER CAD Mighty Stantia-Densor

All changes saved

Code Start Simulation Send To

Text 1 (Arduino Uno R3)



```
1 #include<Servo.h>
2 Servo myservo;
3
4 int ledPin = 12;
5 int pirPin = 13;
6 int pirStat = 0;
7 int pirbuzzer = 11;
8 int pos = 0;
9
10 void setup() {
11   pinMode (ledPin,OUTPUT) ;
12   pinMode (pirPin,INPUT) ;
13   myservo.attach(9) ;
14   Serial.begin(9600) ;
15   myservo.write(pos) ;
16 }
17
18 void loop() {
19   pirStat = digitalRead(pirPin);
20   if(pirStat == HIGH) {
21     digitalWrite(ledPin , HIGH);
22
23     Serial.println("Motion Detected");
24     for(pos = 0 ; pos <=180; pos+=1){
25       myservo.write(pos);
26       delay(20);
27     }
28     digitalWrite(ledPin, LOW);
29     for(pos = 180 ; pos >=0; pos-=1){
```

Serial Monitor

Working:

