

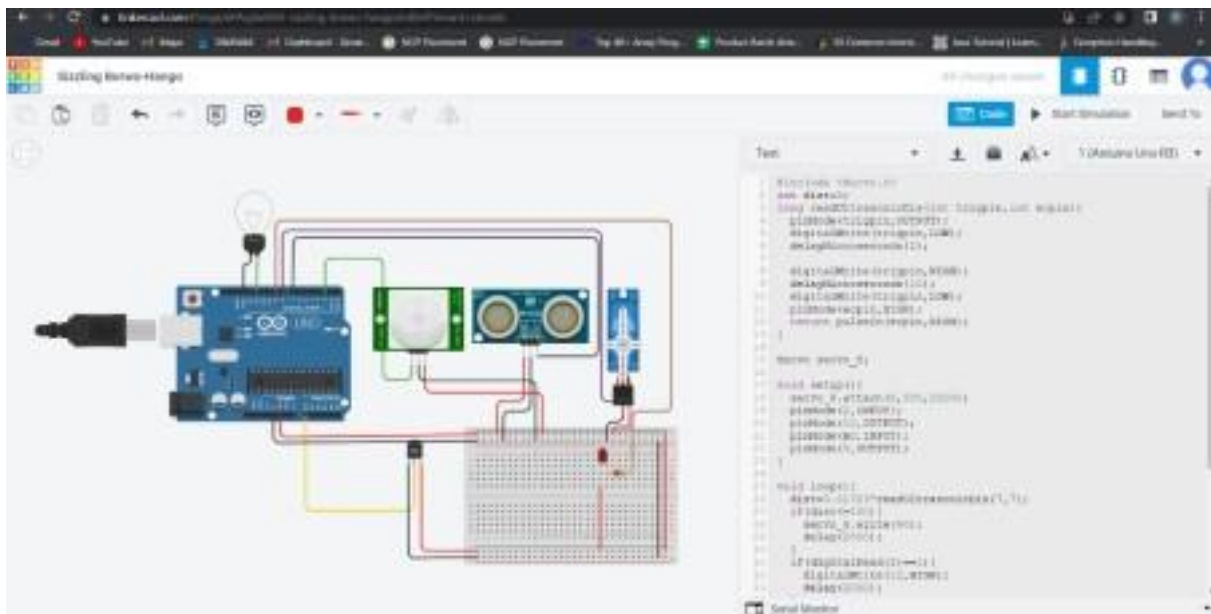
ASSIGNMENT-1

Assignment Date	18 October 2022
Student Name	J.E Vijay
Student Roll Number	73151921059
Maximum Marks	2 Marks

QUESTION-1:

Build a smart home in Thinkercad with 2 sensors, an Led, buzzer and submit it.

SCREENSHOT :



CODE:

```
#include <Servo.h>

int dist=0;

long readUltrasonicDis(int trigpin,int ecpin){
  pinMode(trigpin,OUTPUT);
  digitalWrite(trigpin,LOW);
  delayMicroseconds(2);

  digitalWrite(trigpin,HIGH);
  delayMicroseconds(10);
  digitalWrite(trigpin,LOW);
  pinMode(ecpin,HIGH);
}
```

```
return pulseIn(ecpin,HIGH);
```

```
}
```

```
Servo servo_8;
```

```
void setup(){
```

```
servo_8.attach(8,500,2500);
```

```
pinMode(2,INPUT);
```

```
pinMode(12,OUTPUT);
```

```
pinMode(A0,INPUT);
```

```
pinMode(9,OUTPUT);
```

```
}
```

```
void loop(){
```

```
dist=0.01723*readUltrasonicDis(7,7);
```

```
if(dist<=100){
```

```
servo_8.write(90);
```

```
delay(2000);
```

```
}
```

```
if(digitalRead(2)==1){
```

```
digitalWrite(12,HIGH);
```

```
delay(2000);
```

```
}
```

```
else{
```

```
digitalWrite(12,LOW);
```

```
delay(2000);
```

```
}
```

```
if(analogRead(A0)>200){
```

```
digitalWrite(9,HIGH);
```

```
delay(2000);
```

```
}
```

```
else{  
  digitalWrite(9,LOW);  
  delay(2000)  
; }  
}
```