## Automatic garage opening system

## **Components used:**

Arudino uno

**Bread board** 

Ultrasonic sensor

Servo motor

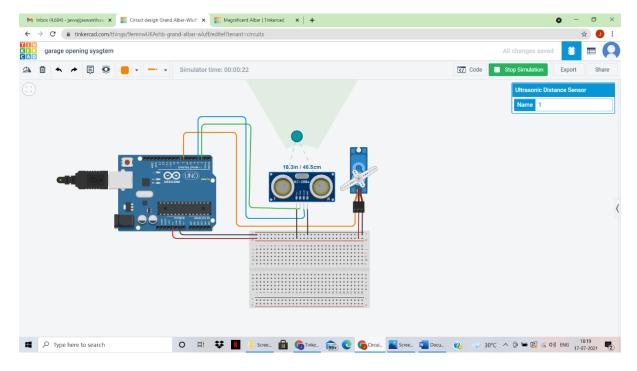
## **Code:**

```
#include <Servo.h>
Servo myservo;
int t=2;
int e=3;
void setup()
 pinMode(t, OUTPUT);
 pinMode(e,INPUT);
 myservo.attach(7);
 Serial.begin(9600);
}
void loop()
{
 digitalWrite(t,LOW);
 digitalWrite(t,HIGH);
 delay(10);
 digitalWrite(t,LOW);
 float dur=pulseIn(3,HIGH);
 float dis=(dur * 0.0343)/2;
 Serial.print("distance in cm: ");
```

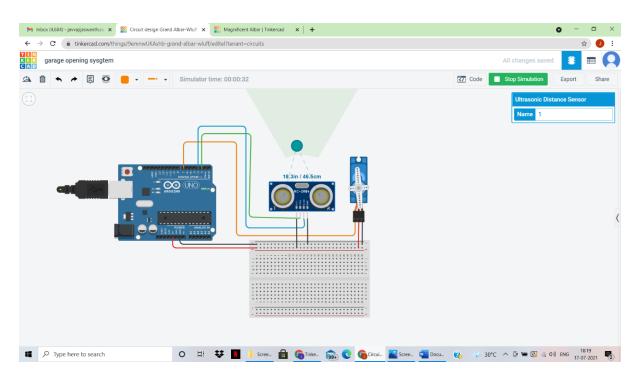
```
Serial.println(dis);
if (dis <= 70){
  myservo.write(180);
  delay(2000);
  myservo.write(0);
}
delay(5000);
myservo.write(0);
}</pre>
```

## **Output:**

1. When distance is less than 70 cm the servo motor starts rotating



2.after some delay the servo motor again comes back to initial position at same distance



**3.** for distance above 70cm the servo motor doesn't rotate as we kept a range less than or equal to 70cm only it starts rotating

