

AUTOMATIC HAND SANITIZER

Welcome to Project! Delighted to x IBM x Circuit design hand sanitizer | Tin x +

tinkercad.com/things/2gL7muGO9JB-fantabulous-bruticus-juttuli/edit?tenant=circuits

TINKERCAD hand sanitizer All changes saved

Simulator time: 00:00:01

Code Stop Simulation Send To

1 (Arduino Uno R3)

How the debugger works

1. Add breakpoints by clicking on the line numbers.
2. Hover over the variables while paused to see their value.
3. Use the buttons above to resume simulation or step one line at a time.

```
19 digitalWrite(trigPin, LOW);
20 delayMicroseconds(2);
21 digitalWrite(trigPin, HIGH);
22 delayMicroseconds(10);
23 digitalWrite(trigPin, LOW);
24 duration = pulseIn(echoPin, HIGH);
25 cm = microsecondsToCentimeters(duration);
26 Serial.print("Distance:");
27 Serial.print(cm);
28 Serial.print("cm");
29 delay(100);
30 if (cm >= 10)
31 {
32   Myservo.write(0);
33 }
34 else
35 {
36   Myservo.write(90);
37 }
38 Serial.println();
39 delay(100);
40 }
41 long microsecondsToCentimeters(long microseconds)
42 {
43   return microseconds / 29 / 2;
44 }
```

Serial Monitor

Distance:189504cm
Distance:190944cm
Distance:190944cm
Distance:189504cm
Distance:189488cm
Distance:190944cm
Distance:189504cm
Distance:189504cmDistanceMeasurement

Send Clear

Type here to search 31°C Partly cloudy 02:02 22-09-2022

Windows taskbar showing search bar, taskbar icons (File Explorer, Edge, Mail, Chrome, etc.), system tray (31°C, 22-09-2022, ENG).

CODE:

```
#include<Servo.h>
const int trigPin=7;
const int echoPin=6;
Servo Myservo;
void setup()
{
  Serial.begin(9600);
  Myservo.attach(5);
  pinMode(trigPin,OUTPUT);
  pinMode(echoPin,INPUT);
  Serial.print("Distance");
  Serial.print("Measurement");
  delay(2000);
}
void loop()
{
  long duration, cm;

  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
  duration = pulseIn(echoPin,HIGH);
  cm = microsecondsToClockCycles(duration);
  Serial.print("Diatance:");
  Serial.print(cm);
  Serial.print("cm");
  delay(100);
  if(cm>=10)
  {
    Myservo.write(0);
  }
  else
  {
    Myservo.write(90);
  }
  Serial.println();
  delay(100);
}
long microsecondsToCentimeters(long microseconds)
{
  return microseconds / 29 /2;
}
```