

## Program no : 10

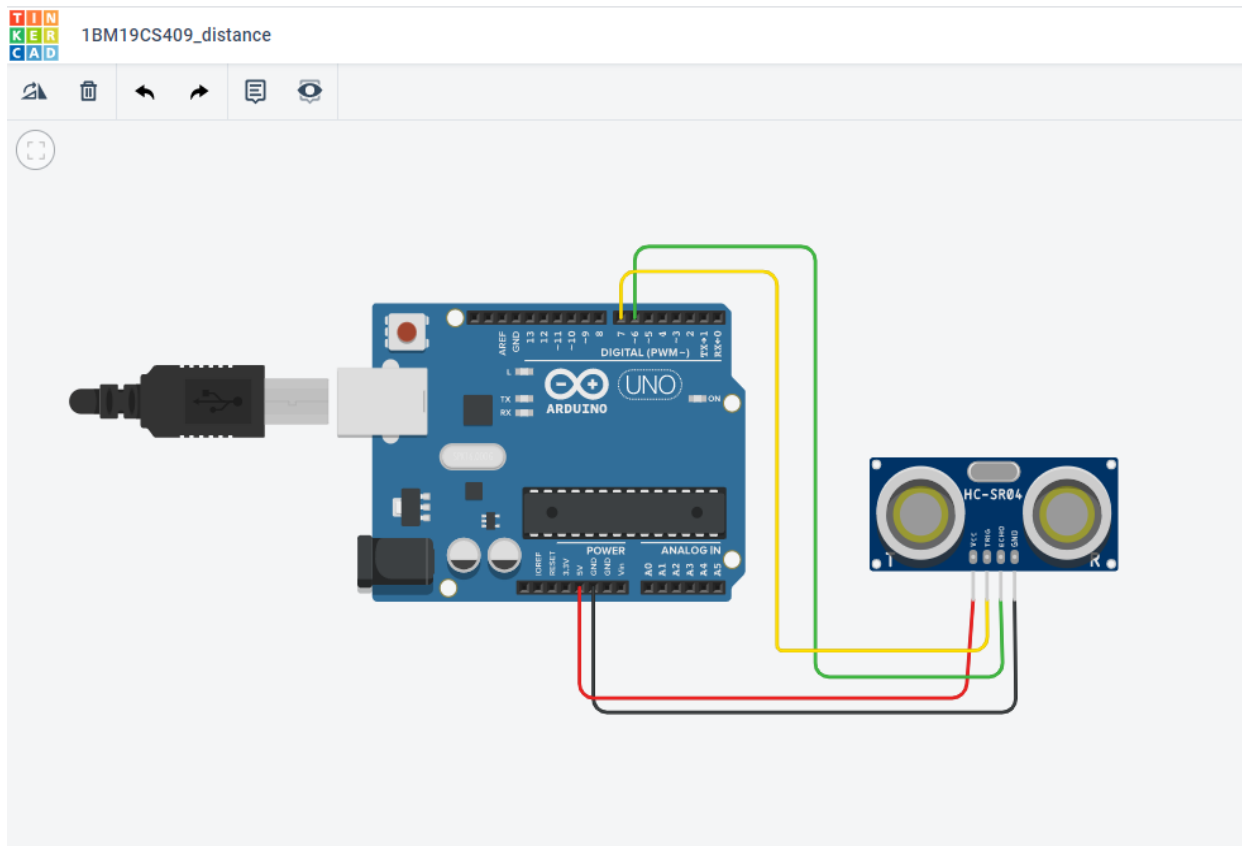
## Program Title : Distance detector

**Aim :** To design a system for measuring the distance between objects.

### Hardware Required

- Arduino Board
- Wires
- Ultrasonic Distance Sensor

### Circuit Diagram :



Code:

Sumalata  
18M19C5409

Program - 10  
Distance detector

```
int triggerPin = 7;
int echoPin = 6;

void setup()
{
  pinMode(triggerPin, OUTPUT);
  pinMode(echoPin, INPUT);
  Serial.begin(9600);
}

void loop()
{
  long duration, cm;
  digitalWrite(triggerPin, LOW);
  delay(2);
  digitalWrite(triggerPin, HIGH);
  delay(10);
```

Ajay

```
digitalWrite(triggerPin, LOW);
duration = pulseIn(echoPin, HIGH);
cm = duration / 29 / 2;
Serial.println(cm);
delay(1000);
}
```

## Observation /Output :

TINKER  
C.A.D.

1BM19CS409\_distance

Saving...

Simulator time: 00:00:28

Code Stop Simulation Export Share

Ultrasonic Distance Sensor  
Name 1

48.4in / 123.0cm

HC-SR04

```
1 int triggerPin=7;
2 int echoPin=6;
3
4 void setup()
5 {
6   pinMode(triggerPin, OUTPUT);
7   pinMode(echoPin, INPUT);
8   Serial.begin(9600);
9 }
10
11 void loop()
12 {
13   long duration, cm;
14   digitalWrite(triggerPin, LOW);
15   delay(2);
16   digitalWrite(triggerPin, HIGH);
17   delay(10);
18   digitalWrite(triggerPin, LOW);
19   duration=pulseIn(echoPin, HIGH);
20   cm=duration/29/2;
21   Serial.println(cm);
22   delay(1000);
23 }
24
```

Serial Monitor

33  
65  
70  
92  
97  
124  
123  
123

Send Clear

