

Program no____7_____

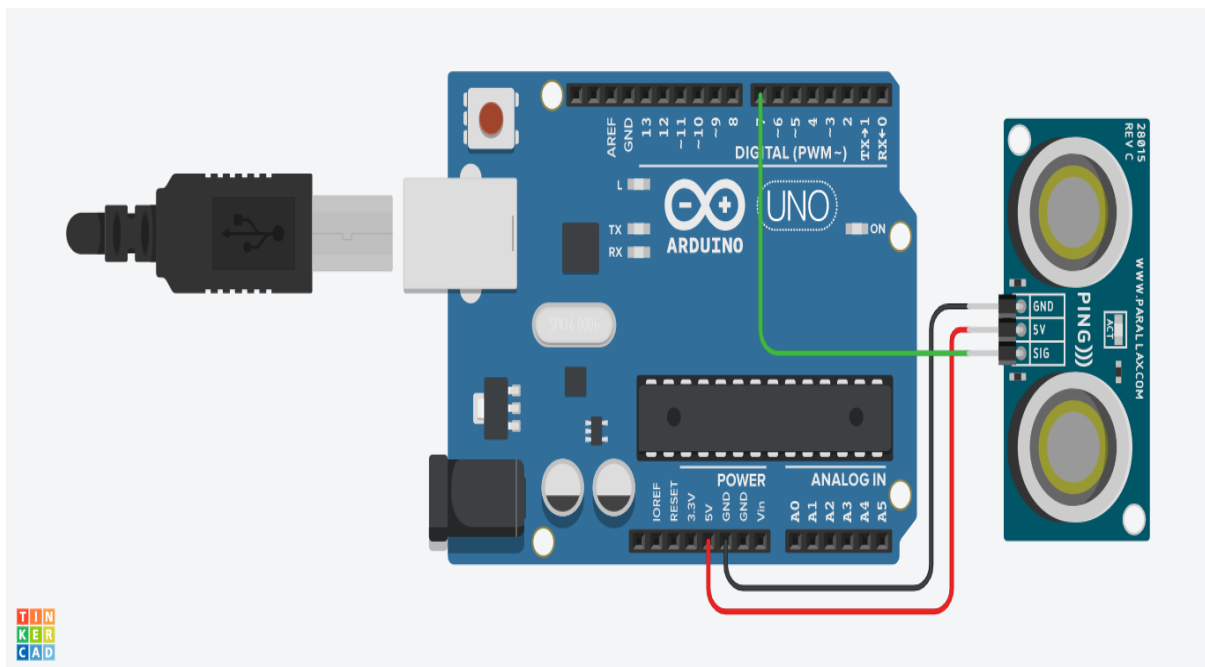
Program Title_____Distance detector_____

Aim The light Fades as the sunlight increases

Hardware Required

- Arduino Board
Ultrasonic distance sensor

Circuit Diagram



Code:

Abhishek R
18M19CS400

Page No.	
Date	/ /

Program Distance between objects

Code

```
float cm;  
float inches;  
float Pulse;  
void setup()  
{  
  Serial.begin(9600);  
}  
void loop()  
{  
  pinMode(7, INPUT);  
  Pulse = pulseIn(7, HIGH);  
  inches = Pulse / 147;  
  cm = inches * 2.54;  
  Serial.print(inches);  
  Serial.print("in, ");  
  Serial.print(cm);  
  Serial.print("cm");  
  Serial.println();  
  delay(500);  
}
```

Abhishek R

Observation /Output

It will tell the distance in inches and centimetre.

The screenshot displays the TinkerCAD simulation environment. At the top, the title bar reads "distance - 1BM19CS400" and "All changes saved". The simulator time is "00:00:00.062". The main workspace shows an Arduino Uno R3 board connected to an Ultrasonic Distance Sensor. The sensor's display shows "39.3in / 99.8cm". A green cone represents the sensor's field of view. The Text editor on the right contains the following code:

```
1 float cm;
2 float inches;
3 float pulse;
4
5 void setup()
6 {
7   Serial.begin(9600);
8 }
9
10
11 void loop()
12 {
13   pinMode(7, INPUT);
14   pulse = pulseIn(7, HIGH);
15   inches = pulse/147;
16   cm = inches * 2.54;
```

Below the code is the Serial Monitor, which displays "0.00in, 0.00cm". The bottom of the interface shows a "Send" button and a "Clear" button.