

PROGRAM CODE:

```
int
sensor=4,
trig=2,
echo=2,
light=8,
buzz=12;

    int dist = 0;
    long objectDistance(int a, int b)
    {
        pinMode(a, OUTPUT); // Clear the trigger
        digitalWrite(a, LOW);
        delayMicroseconds(2);
        digitalWrite(a, HIGH);
        delayMicroseconds(10);
```

```
digitalWrite(a, LOW);
 pinMode(b, INPUT);
 return pulseln(b, HIGH);
}
void setup()
{
 Serial.begin(9600);
 pinMode(sensor, INPUT);
 pinMode(light, OUTPUT);
 pinMode(buzz, OUTPUT);
 digitalWrite(light, LOW);
}
void loop()
{
 //readUltrasonicDistance(7, 7)
 dist = 0.01723 * objectDistance(trig, echo);
 Serial.print("Distance is ");
 Serial.print(dist);
 Serial.println("cm");
 if(dist>50 && dist<100)
 {
  tone(buzz, 50);
  delay(2000);
  noTone(buzz);
  //delay(1000);
  if(digitalRead(sensor))
  {
```

```
digitalWrite(light, HIGH);
  delay(2000);
}
}
```