

## **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 pulseIn(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);  
    }  
  }  
}  
}
```

