

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);
        }
    }
}

```

