



```
int sensor=4, trig=2, echo=2, light=8, buzz=12;  
int dist = 0;
```

```
long objectDistance(int a, int b)  
{  
  pinMode(a, OUTPUT);  
  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()
{

    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);

        if(digitalRead(sensor))
        {
            digitalWrite(light, HIGH);
            delay(2000);
        }
    }
}
```