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);
    }
  }
}
```