

ASSIGNMENT 1

PROGRAM

```
const int echoPin=2, triggerPin=3, red=4, green=5, blue=6;
const int buzz = 7;
int pulseValue;
float distance;
void setup( ) {
  pinMode(echoPin, INPUT);
  pinMode(triggerPin, OUTPUT);
  pinMode(red, OUTPUT);
  pinMode(green, OUTPUT);
  pinMode(blue, OUTPUT);
  pinMode(buzz, OUTPUT);
  Serial.begin(9600);
}
void loop( )
{

  digitalWrite(triggerPin, LOW);
  delayMicroseconds(5);
  digitalWrite(triggerPin, HIGH);
  delayMicroseconds(10);
  pulseValue=pulseIn(echoPin, HIGH);
  distance=(pulseValue*0.0001657*39.37);

  if (distance<=5)
  {
    digitalWrite(red, HIGH);
    digitalWrite(green, LOW);
    digitalWrite(blue, LOW);
    tone(buzz, 500);
  }

  else if (distance<=10)
  {
    digitalWrite(green, HIGH);
    digitalWrite(red, LOW);
    digitalWrite(blue, LOW);
    tone(buzz, 1000);
  }
  else
```

```

{
  digitalWrite(blue, HIGH);
  digitalWrite(red, LOW);
  digitalWrite(green, LOW);
  tone(buzz, 1500);
}

```

```

Serial.print(distance);
Serial.println(" inch/es");
delay(500);
}

```

