

# **IBM ASSIGNMENT- 1**

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## **Source code:**

```
int var1=2;
int var2=3;

void setup() {
  Serial.begin(9600);
  pinMode(var1,OUTPUT);
  pinMode(var2,INPUT);
  pinMode(12,OUTPUT);
} void loop() {
  digitalWrite(var1,LOW);
  digitalWrite(var1,HIGH);
  delayMicroseconds(10);
  digitalWrite(var1,LOW);
  float din=pulseIn(var2,HIGH);
  float grad=(din*0.0343)/2;
  Serial.print("Distance is: ");
  Serial.println(grad);
  if(grad>=100) {
    digitalWrite(8,HIGH);
    digitalWrite(7,HIGH);
  }
  if(grad>=100)
  {
    for(int i=0; i<=30000; i=i+10)
    {
      tone(12,i);
      delay(1000);
      noTone(12);
      delay(1000);
    }
  }
}
```

```

}
double a= analogRead(A0);
double t=((a/1024)*5)-0.5)*100;
Serial.print("Temp Value: "); S
Serial.println(t);
delay(1000);
if(t>=100) {
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
}
if(t>=100)
{
for(int i=0; i<=30000; i=i+10)
{
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
}
}
if(t<100)
{
digitalWrite(8,LOW);
digitalWrite(7,LOW);
}
}

```

**CIRCUIT DIAGRAM:**

