

ASHKKAR SIDHIK BS

711319EC011

BATCH NO:B8-2A4E

```
int P=4;

int Q=5;


void setup()
{
  Serial.begin(9600);
  pinMode(P,OUTPUT);
  pinMode(Q,INPUT);
  pinMode(10,OUTPUT);
}


void loop()
{
  //ultrasonic sensor
  digitalWrite(P,LOW);
  digitalWrite(P,HIGH);
  delayMicroseconds(10);
  digitalWrite(P,LOW);
  float A=pulseIn(Q,HIGH);
  float B=(A*0.0343)/2;
  Serial.print("Distance is: ");
  Serial.println(B);


  //LED ON
  if(B>=150)
  {
    digitalWrite(5,HIGH);
```

```
digitalWrite(6,HIGH);  
}
```

```
//Buzzer For ultrasonic Sensor  
if(B>=150)  
{  
for(int i=0; i<=30000; i=i+10)  
{  
tone(12,i);  
delay(1000);  
noTone(12);  
delay(1000);  
}  
}
```

```
//Temperate Sensor  
double X= analogRead(A0);  
double Y=((X/1024)*5)-0.5)*100;  
Serial.print("Temp Value: ");  
Serial.println(Y);  
delay(1000);
```

```
//LED ON  
if(Y>=120)  
{  
digitalWrite(5,HIGH);  
digitalWrite(6,HIGH);
```

```
}
```

```
//Buzzer for Temperature Sensor
```

```
if(Y>=120)
```

```
{
```

```
for(int i=0; i<=30000; i=i+10)
```

```
{
```

```
tone(12,i);
```

```
delay(1000);
```

```
noTone(12);
```

```
delay(1000);
```

```
}
```

```
}
```

```
//LED OFF
```

```
if(Y<120)
```

```
{
```

```
digitalWrite(5,LOW);
```

```
digitalWrite(6,LOW);
```

```
}
```



