

EXCEL ENGINEERING COLLEGE
DEPARTMENT OF INFORMATION TECHNOLOGY
IOT ASSIGNMENT -1
SMART SOLUTION FOR RAILWAYS

```
int t=2;
int e=3;

void setup()

{

    Serial.begin(9600);

    pinMode(t,OUTPUT);
    pinMode(e,INPUT);
    pinMode(12,OUTPUT);

}

void loop()

{

    //ultrasonic sensor
    digitalWrite(t,LOW);
    digitalWrite(t,HIGH);
    delayMicroseconds(10);
    digitalWrite(t,LOW); float
    dur=pulseIn(e,HIGH); float
    dis=(dur*0.0343)/2;

    Serial.print("Distance is: ");

    Serial.println(dis);

    //LED ON
    if(dis>=100)

    { digitalWrite(8,HIGH);

        digitalWrite(7,HIGH);
```

```

}

//Buzzer For ultrasonic Sensor
if(dis>=100)

{

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

{

tone(12,i);
delay(1000);
noTone(12);
delay(1000);

}

}

//Temperate Sensor

double a= analogRead(A0);
double t=((a/1024)*5)-0.5)*100;

Serial.print("Temp Value: ");
Serial.println(t); delay(1000);
//LED ON

if(t>=100)

{

digitalWrite(8,HIGH);
digitalWrite(7,HIGH);

}

//Buzzer for Temperature Sensor

if(t>=100)

{

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

{

```

```

tone(12,i); delay(1000); noTone(12); delay(1000);

}

}

```

```

//LED OFF
if(t<100)

{

digitalWrite(8,LOW);
digitalWrite(7,LOW);

}
}

```

