

ASSIGNMENT 2 -

Build a python code, Assume you get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

Code :

```
int t=2;

int e=3;

void setup()

{

  Serial.begin(9600);

  pinMode(t,OUTPUT);

  pinMode(e,INPUT);

  pinMode(12,OUTPUT);

}

void loop()

{

  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);

  if(dis>=100)

  {

    digitalWrite(8,HIGH);

    digitalWrite(7,HIGH);

  }

}
```

```
if(dis>=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: ");
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);

}

}

```

IMAGE :

