Assignment -2
Python Programming

Assignment Date	28 September 2022
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Maximum Marks	2 Marks

Question-1:

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.

Solution:

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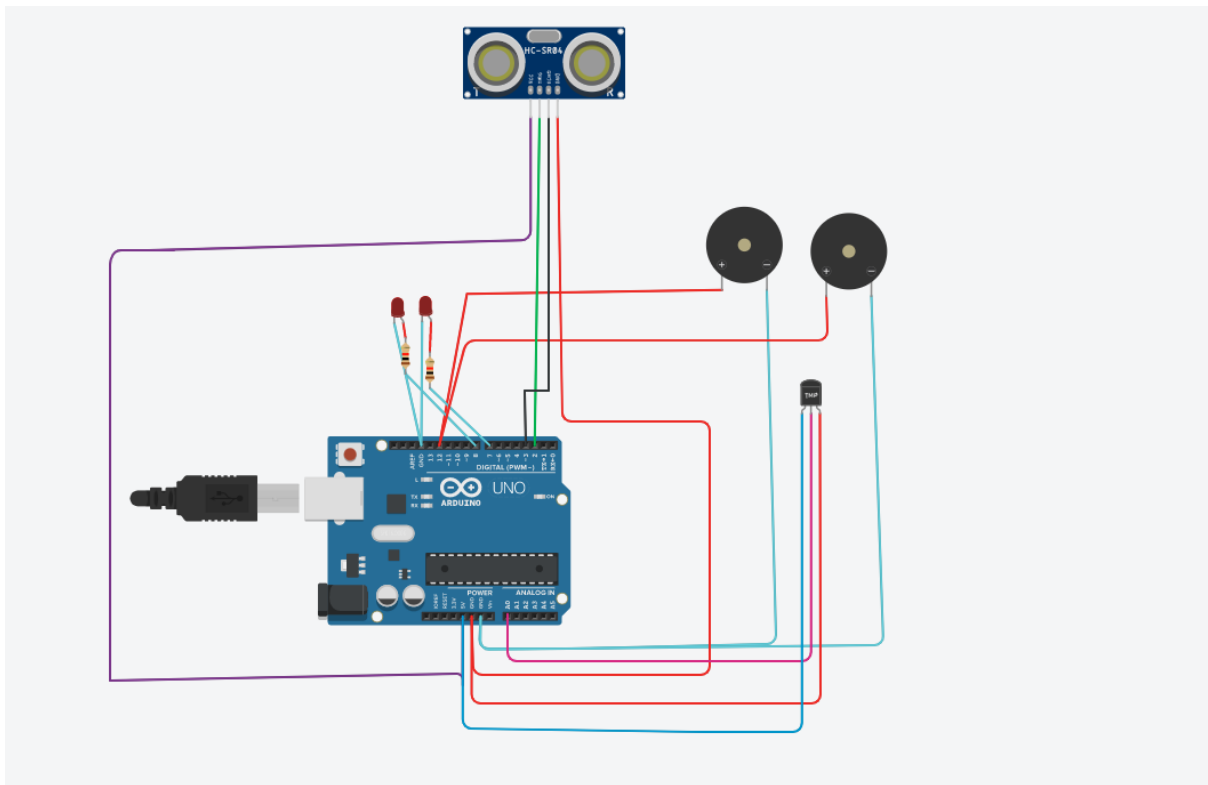
```
{
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
}
if(dis>100)
{
for(int i=0; i<=30000; i=i+10)
{
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
}
}
double a= analogRead(A0);
double t=(((a/1024)*5)-0.5)*100;
Serial.print("Temp Value: ");
Serial.println(t);
delay(1000);
if(t>=100)
{
digitalWrite(8,HIGH);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

}

}
```

Picture:

Output:

Distance is: 0.00
Temp Value: 369.43
Distance is: 112.88
Distance is: 112.88
Distance is: 112.88
Distance is: 112.88
Distance is: 112.88
Distance is: 112.88