**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)

  {

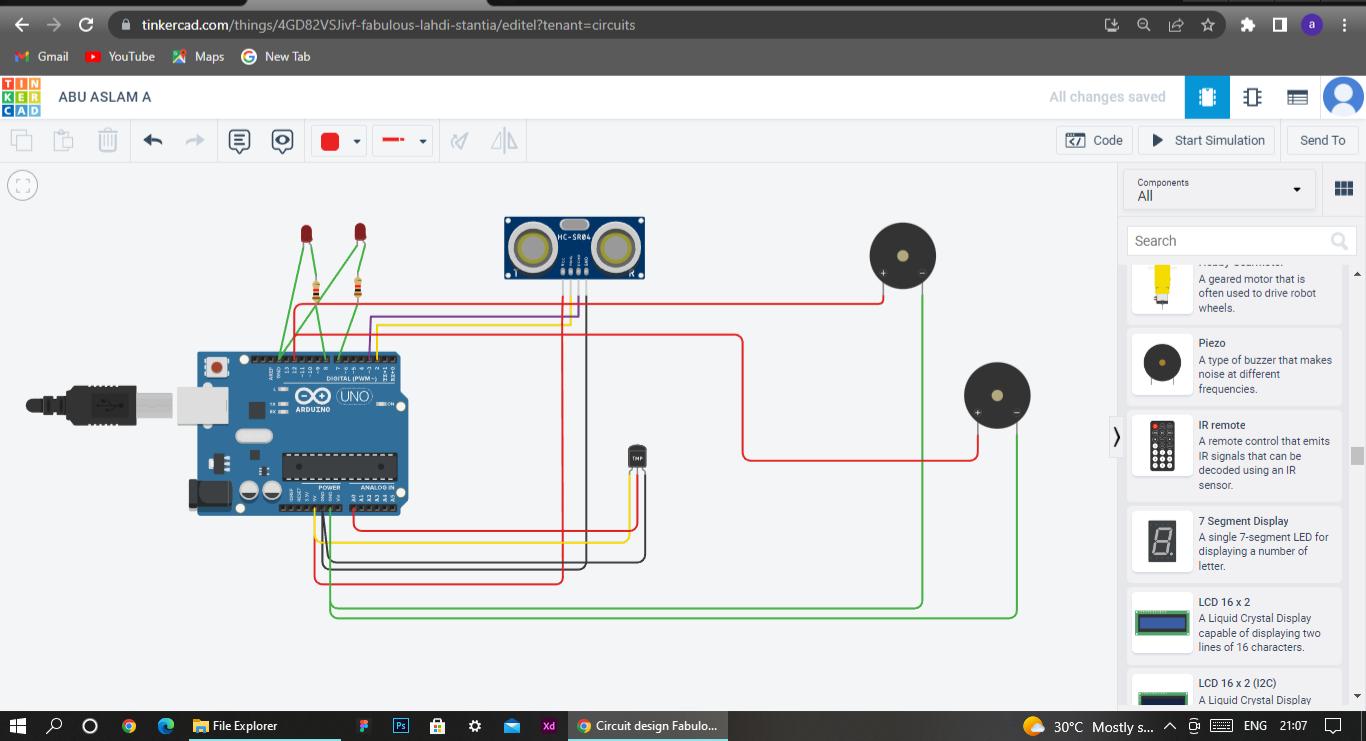
    digitalWrite(8,LOW);

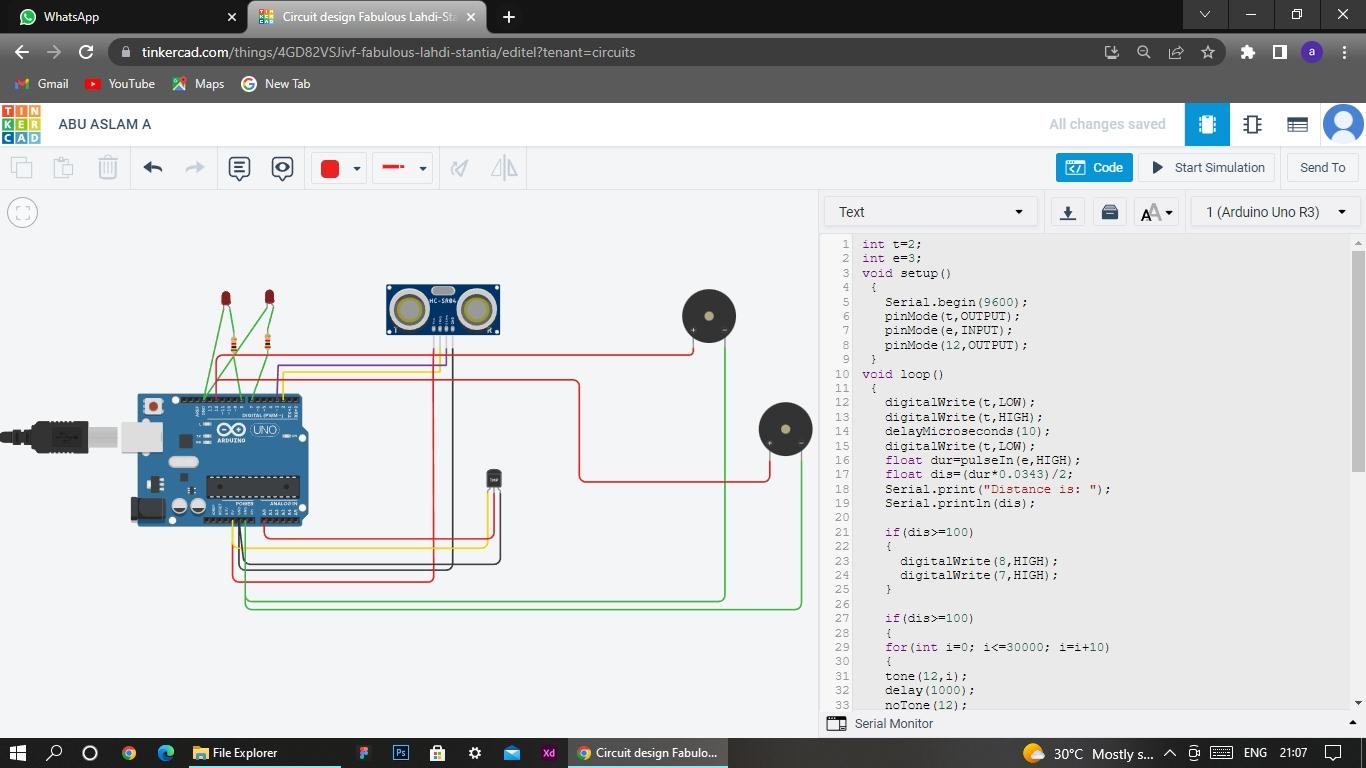
    digitalWrite(7,LOW);

  }

}

**IMAGE :**

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