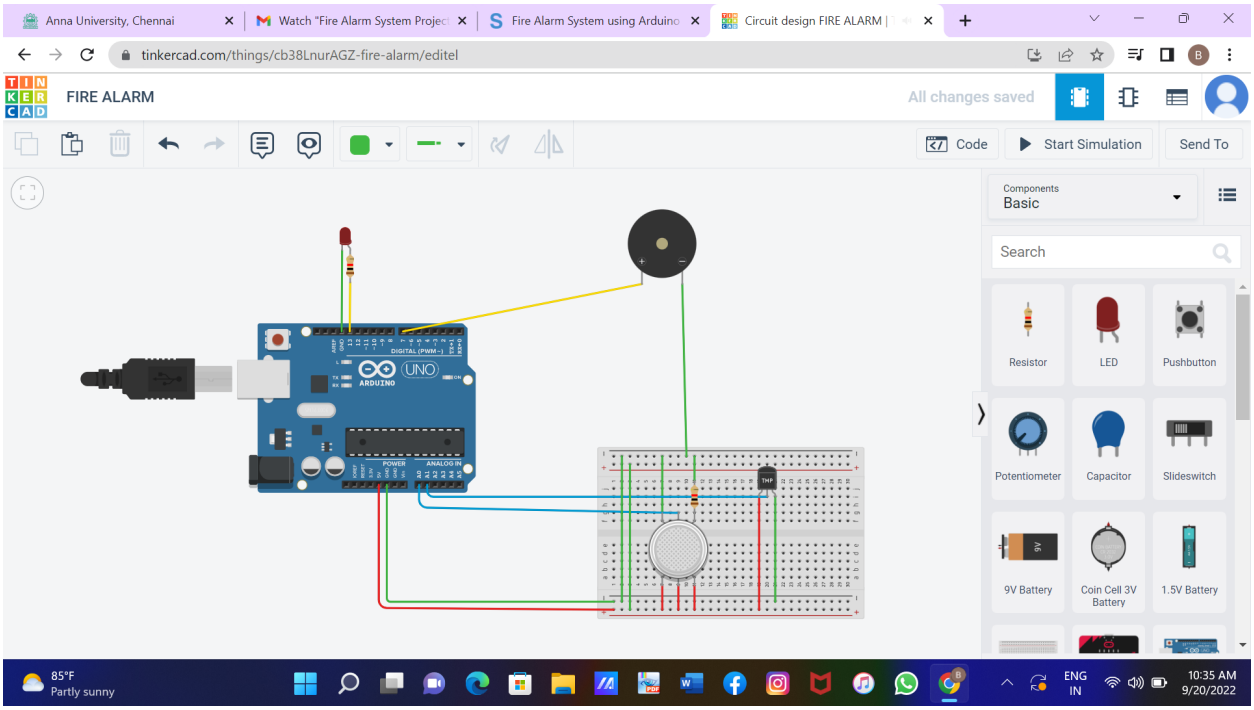
ASSIGNMENT 1

FIRE ALARM SYSTEM

COMPONENTS USED:

1.Arduino UNO
2.Temperature Sensor
3.Gas Sensor
4.Resistor
5.Breadboard
6.LED
7.Piezo buzzer
8.Jumper wires

CIRCUIT DIAGRAM:



CODE:

```
float temp;
float vout;
float vout1;
int LED = 13;
int gasSensor;
int piezo = 7;
void setup()
{
pinMode(A0,INPUT);
pinMode(A1,INPUT);
pinMode(LED,OUTPUT);
pinMode(piezo,OUTPUT);
Serial.begin(9600);
}
void loop()
{
vout=analogRead(A1);
vout1=(vout/1023)*5000;
temp=(vout1-500)/10;
gasSensor=analogRead(A0);
if (temp>=80)
{
digitalWrite(LED,HIGH);
}
else
{
digitalWrite(LED,LOW);
}
if (gasSensor>=100)
{
digitalWrite(piezo,HIGH);
}
else
{
digitalWrite(piezo,LOW);
```

```
}
Serial.print("in DegreeC= ");
Serial.print(" ");
Serial.print(temp);
Serial.print("\t");
Serial.print("GasSensor= ");
Serial.print(" ");
Serial.print(gasSensor);
Serial.println();
delay(1000);
}
```