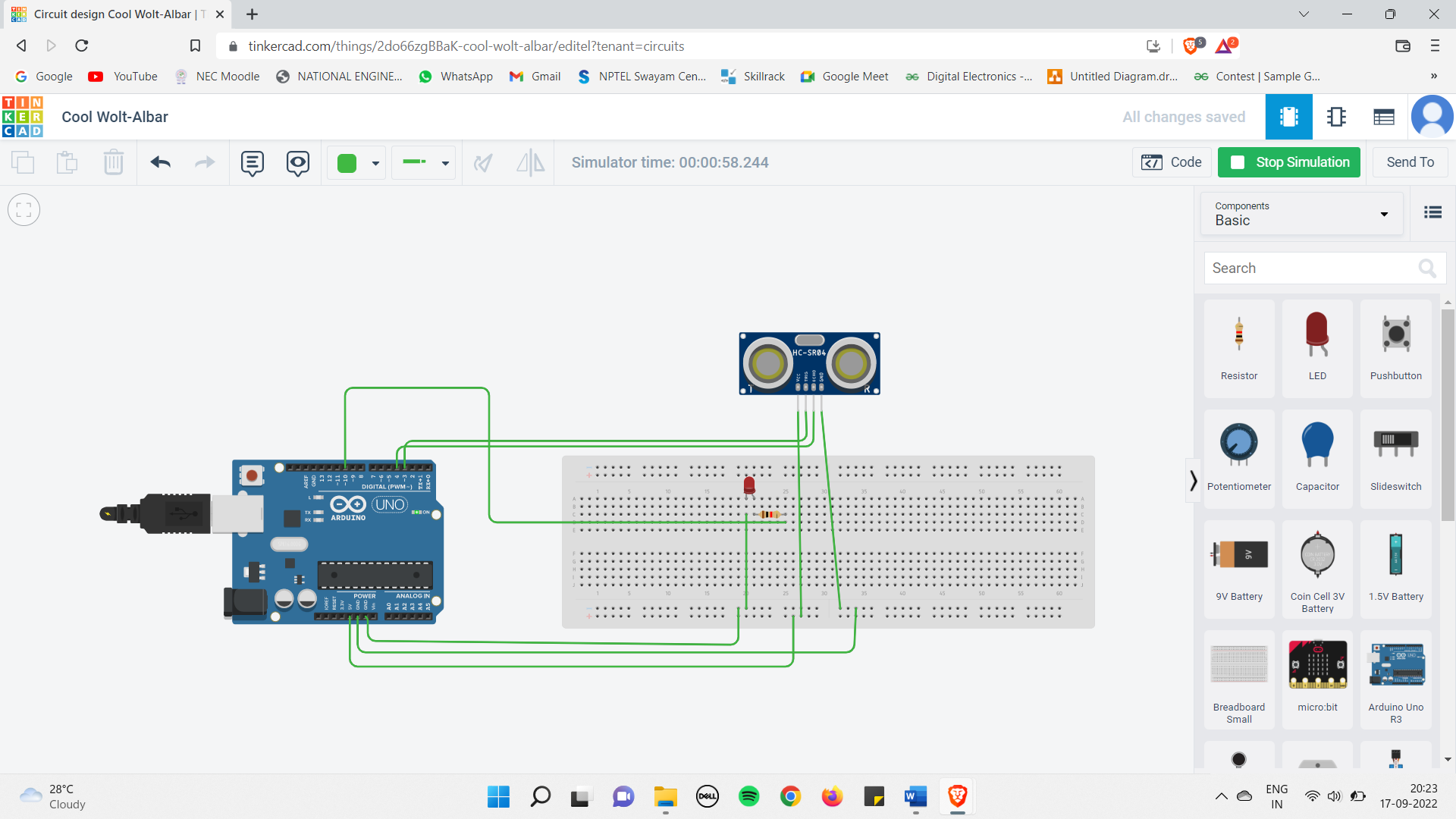
**ASSIGNMENT 1 :**



**ARDUINO CODE:**

//C++ code

#define trigPin 3

#define echoPin 4

long duration;

int distance;

const int redPin = 10;

void setup()

{

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

Serial.begin(9600);

}

void loop()

{

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

distance = duration \* 0.034 / 2;

delay(2000);

Serial.print("Distance: ");

Serial.print(distance);

Serial.println(" cm");

if(distance <= 10)

{

digitalWrite(redPin,255);

Serial.println("ON");

}

Else

{

digitalWrite(redPin,127);

Serial.println("OFF");

}

}