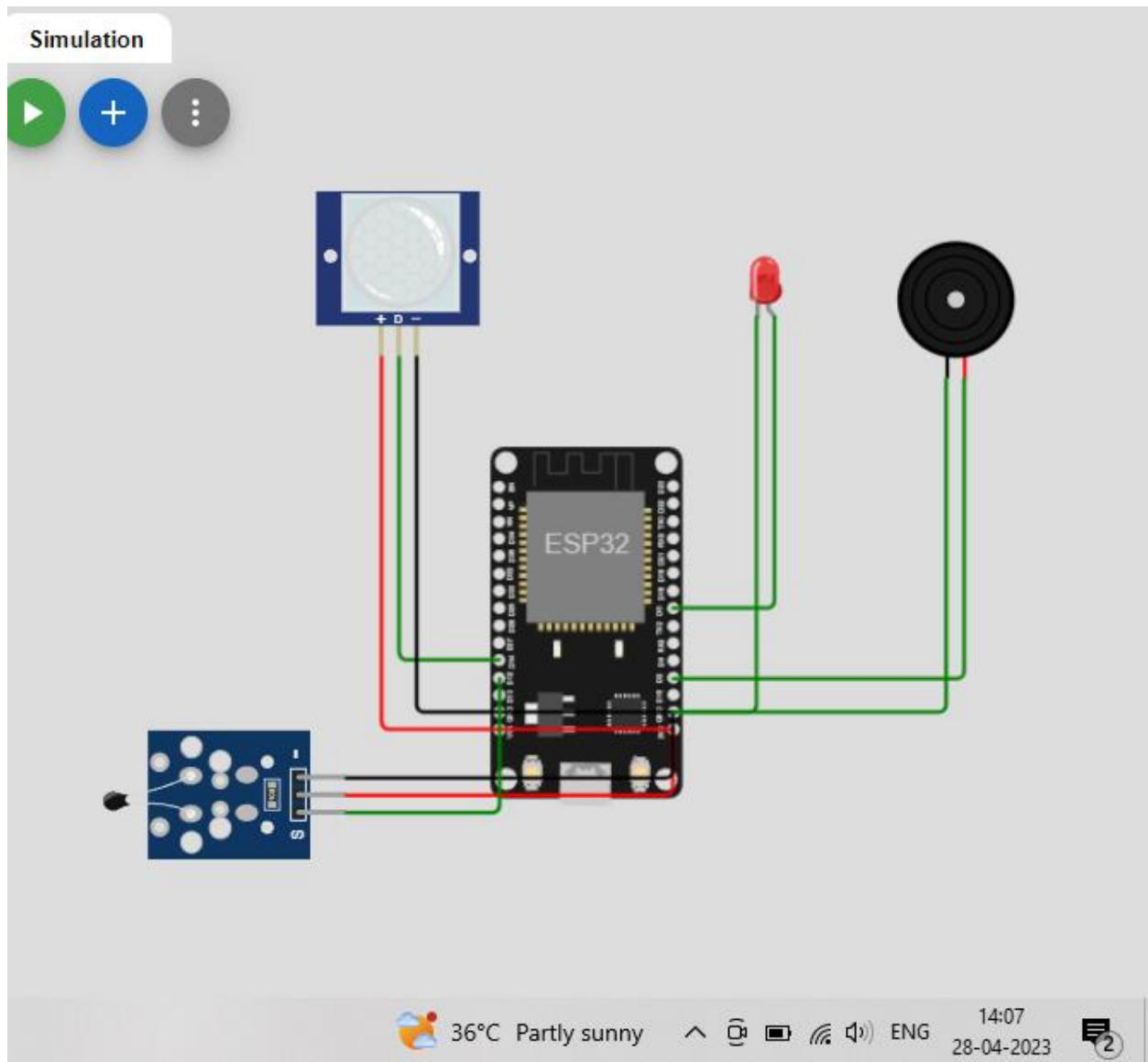# ASIGNMENT-1

Question:

★ Build a smart home in wokwi with minimum 2 sensors, Led, buzzer.

➔ Example: pir sensor for home security, servo motor for door lock

system.

➔ Hint: replicate tinkercad code and connections in wokwi and integrate

both codes to a single code.

Circuit diagram:

Code:

```
#define Buzzer 2

#define Motion 14

#define Temp 12

#define LedPin 5
```

```
void setup() {

  // put your setup code here, to run once:

  Serial.begin(9600);

  pinMode(LedPin, OUTPUT);

  pinMode(Buzzer, OUTPUT);

  pinMode(Temp, INPUT);

  pinMode(Motion, INPUT);

}

void loop() {

  // put your main code here, to run repeatedly:

  int motion=digitalRead(Motion);

  if(motion==HIGH){

    Serial.println("Motion Detected:");

    digitalWrite(LedPin, HIGH);

    digitalWrite(Buzzer, HIGH);

    delay(1000);

  }

  else{
```

```
    digitalWrite(LedPin, LOW);

    digitalWrite(Buzzer, LOW);

  }

 int temp=analogRead(Temp);

 float temperature=((temp*5.0)/1023)*100;

 Serial.print(temperature);

 Serial.println("%C");

}
```

Output:

Simulation

00:43.080 49%

1022.97%C
1022.97%C
1022.97%C
1022.97%C
1022.97%C
1022.97%C
1022.97%C

35°C Partly sunny   ENG   14:19
28-04-2023