task-1

Electronics and Power Department

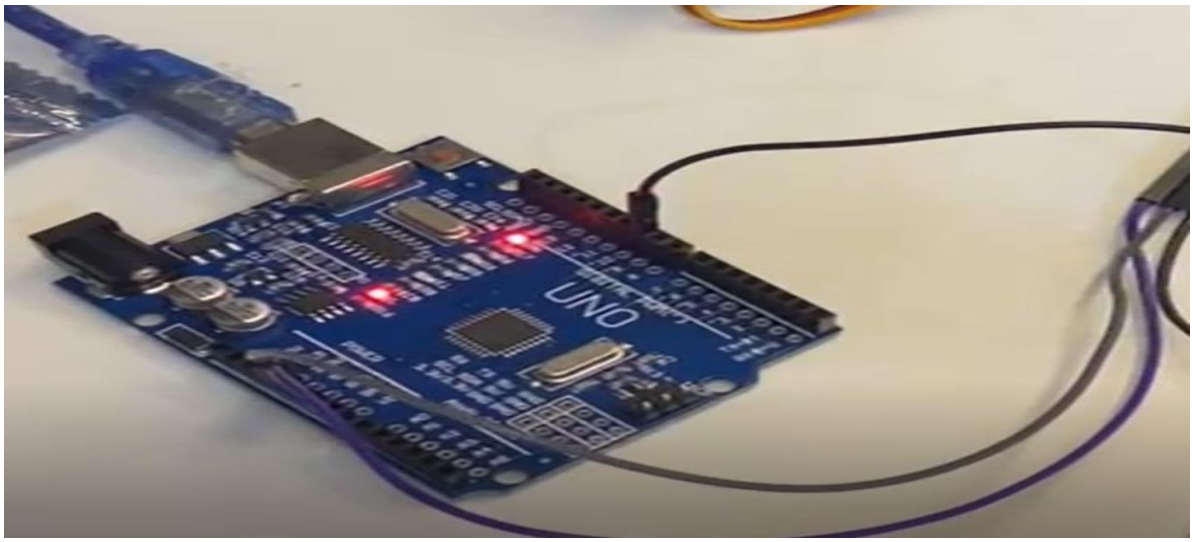
First download Arduino app , After that,

we worked on connecting and installing the pieces

(located in the headquarters of the city of Mecca)

and connected them to the laptop:

(MicroServo+Arduino UNO)



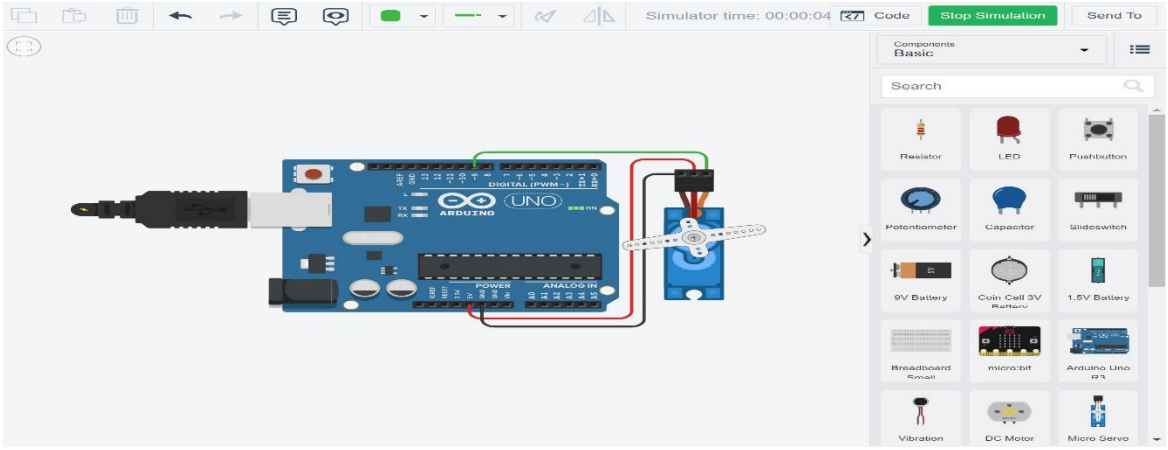
To start using the (Arduino app) to program them and work the algorithm to move them 180 degrees, The code used is:

task-1_Electronics_and_Power_Department_

```
// C++ code
//

#include <Servo.h>

int pos = 0;

Servo servo_9;

void setup()
{
  servo_9.attach(9, 500, 2500);
}

void loop()
{
  // sweep the servo from 0 to 180 degrees in steps
  // of 1 degrees
  for (pos = 0; pos <= 180; pos += 1) {
    // tell servo to go to position in variable 'pos'
    servo_9.write(pos);
    // wait 10 ms for servo to reach the position
    delay(10); // Wait for 10 millisecond(s)
  }
  for (pos = 180; pos >= 0; pos -= 1) {
    // tell servo to go to position in variable 'pos'
    servo_9.write(pos);
    // wait 10 ms for servo to reach the position
    delay(10); // Wait for 10 millisecond(s)
  }
}
```

Micro servo-Arduino UNO.MOV

I open the simulation program (tinker cad) (www.tinkercad.com)to make sure the code works



And it worked well.