Arduino LAB

Assignment 2.

Afnan Mousa Mabrouk   ID : 15

Shimaa Kamal El-deen   ID : 34

Overview

Required to implement a code to add two numbers up to 4 digits and Every time the user enters a number (4 digits) the Arduino must print this number on the screen,and the result of the two numbers.

Goals

➢ Required to use serial communication in Arduino to perform a simple arithmetic operation.:
  ● Should use the serial monitor to send an up to 4 digits signed number
  ● followed by a "newline" character to signal the end of input.
  ● Then you enter another up to 4 digits signed number
  ● followed by a "newline" character.
  ● The Arduino then must add these two numbers together and outputs the result in the serial monitor.
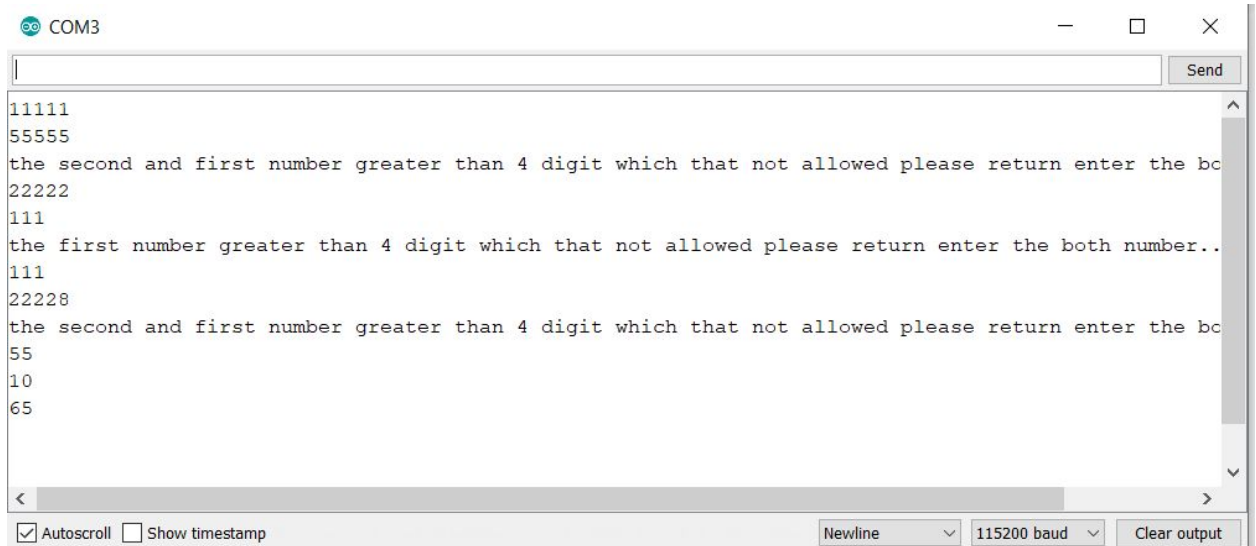
Overall organization :

➢ The input is taken from the user as a string and converted to integer if the user enters the character the number store as 0.
➢ Check if the number less than or equal 4 digit :
  ● If not, the error message appears to the user to enter the two numbers again .
➢ Then if the two numbers are valid the sum of them print in the serial monitor .

The link of the code :

The Code to add two numbers up to 4 digits implementation.

sample runs :

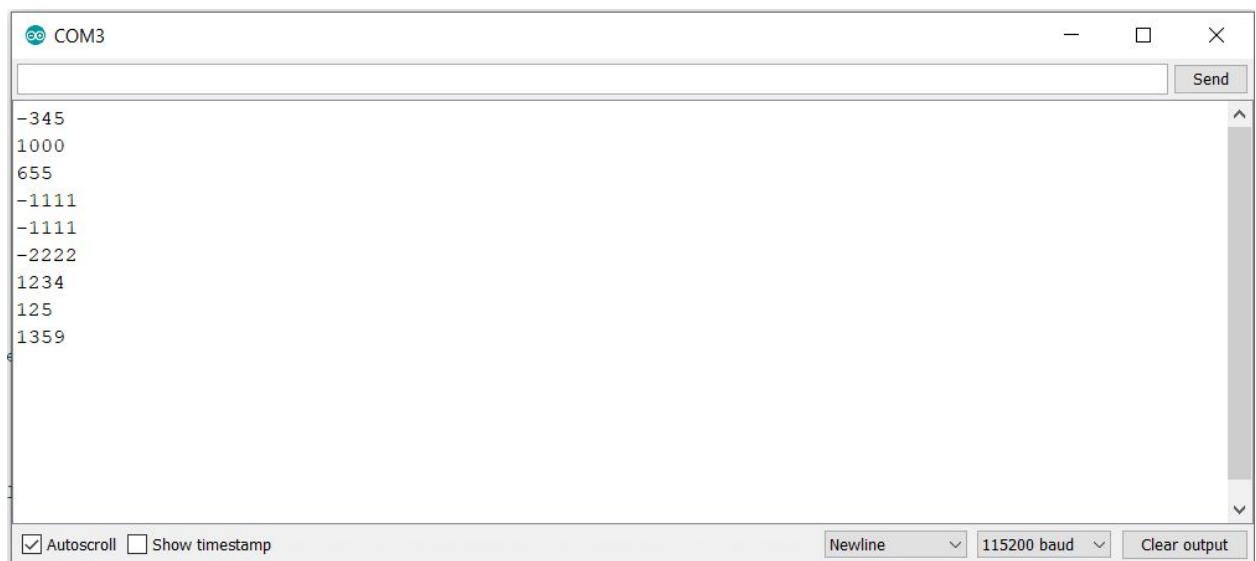➢ Some sample runs when the user enter number greater than 4 digit and the output of the program :

```
COM3                                                          —   □   ×
[                                                                    ]  Send

11111
55555
the second and first number greater than 4 digit which that not allowed please return enter the bo
22222
111
the first number greater than 4 digit which that not allowed please return enter the both number..
111
22228
the second and first number greater than 4 digit which that not allowed please return enter the bo
55
10
65


☑ Autoscroll ☐ Show timestamp              Newline  ∨  115200 baud ∨  Clear output
```

➢ when the user enter number less than 4 digit and the output of the program :

```
COM3                                                          —   □   ×
[                                                                    ]  Send

-345
1000
655
-1111
-1111
-2222
1234
125
1359


☑ Autoscroll ☐ Show timestamp              Newline  ∨  115200 baud ∨  Clear output
```