Arduino Lab 2

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Screenshots of the simulation:


```
1   int number = 0;
2   int number2 = 0;
3   int res=0;
4
5   void setup() {
6       Serial.begin(9600);
7       Serial.setTimeout(4);
8   }
9
10  void loop() {
11
12  }
13
14  void serialEvent(){
15      if(number ==0){
16          number = Serial.parseInt();
17          Serial.println(number);
18      }
19      else{
20          number2 = Serial.parseInt();
```

Serial Monitor

```
-345
1000
655
-1111
-1111
-2222
1234
125
1359
```
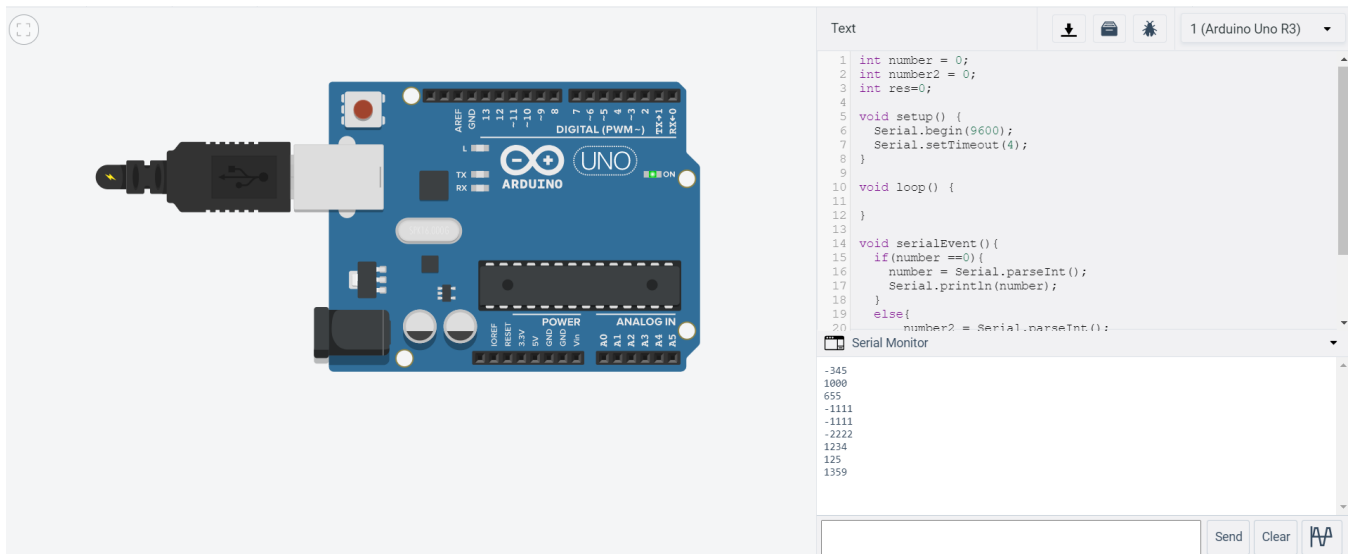
Code Decisions:

I have opted to use the function "Serial.parseInt()" instead of construction a naïve manual function to read the user input as the built-in function is more reliable and it also end the user input with a new line character as required.

Also, Serial Time out has been set to 4 milliseconds so if user input exceeds 5 characters (a sign and a 4-digit number) then the value taken from the user will be unreliable (also as required).

Code:

```
1.    int number = 0;
2.    int number2 = 0;
3.    int res=0;
4.
5.    void setup() {
6.      Serial.begin(9600);
7.      Serial.setTimeout(4);
8.    }
9.
10.   void loop() {
11.
12.   }
13.
14.   void serialEvent(){
15.     if(number ==0){
16.       number = Serial.parseInt();
17.       Serial.println(number);
18.     }
19.     else{
20.         number2 = Serial.parseInt();
21.         Serial.println(number2);
22.         res = number + number2;
23.         Serial.println(res);
24.         number = 0;
25.     }
26.   }
```