

LAB 2

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Part-01: Serial Monitor:

```
void setup() {
  Serial.begin(9600);
}

void loop() {
  Serial.println("please enter first number:");
  int firstNumb=readNumber();
  Serial.println(firstNumb);
  Serial.println("please enter second number:");
  int secondNumb=readNumber();
  Serial.println(secondNumb);
  int result =firstNumb+secondNumb;
  Serial.println("The result is:");
  Serial.println(result);
  Serial.println("-----");
}

int readNumber(){
  char value[5];
  for(int i=0;i<5;){
    if(Serial.available( ))
    {
      char inpChar =Serial.read();
      value[i]=inpChar;
      i++;
    }
  }

  return atoi(value);
}
```

Result:

```
22     char inpChar =Serial.read();
23     value[i]=inpChar;
24     i++;
25 }
```

Output Serial Monitor X

Message (Enter to send message to 'Arduino Uno' on 'COM3')

please enter first number:
1562
please enter second number:
2547
The result is:
4109

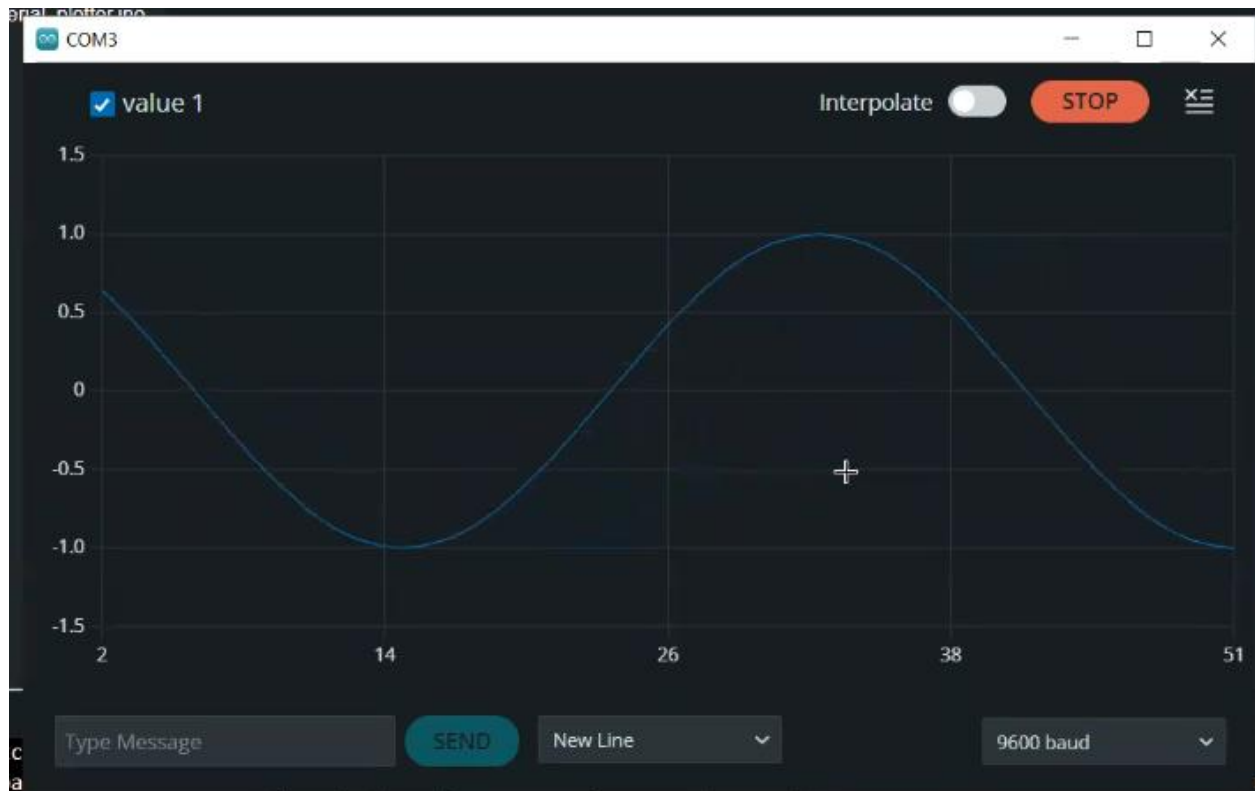
please enter first number:

00:12

Part-02: Serial Plotter:

```
void setup() {  
    Serial.begin(9600);  
}  
  
void loop() {  
    for (int i = 0; i < 360; i += 10) {  
        Serial.println(sin(i * DEG_TO_RAD));  
        delay(50);  
    }  
}
```

Result in Arduino:



Observation:

The curve of sin function starts wide as the domain is small and since the domain become larger the sine curve become very clear .