CS 003 - FUNDAMENTALS OF COMPUTER SCIENCE II (C++)

# Lab1 : Review

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## Problem 1.

- Write a program that works as follows. Use **while** loop.

```
Enter the number of inputs : 0
There will be no input
```

```
Enter the number of inputs : 5
Enter an integer #1 : 10
Enter an integer #2 : 14
Enter an integer #3 : 20
Enter an integer #4 : 11
Enter an integer #5 : 8

Max number : 20
```

```
Enter the number of inputs : 10
Enter an integer #1 : 1
Enter an integer #2 : 4
Enter an integer #3 : 5
Enter an integer #4 : 7
Enter an integer #5 : 11
Enter an integer #6 : 13
Enter an integer #7 : 22
Enter an integer #8 : 44
Enter an integer #9 : 55
Enter an integer #10 : 77

Max number : 77
```

```
Enter the number of inputs : 7
Enter an integer #1 : 100
Enter an integer #2 : 80
Enter an integer #3 : 77
Enter an integer #4 : 55
Enter an integer #5 : 44
Enter an integer #6 : 20
Enter an integer #7 : 5

Max number : 100
```

## Problem 2.

- Write a program that computes the following. Use **for** loop. Define a function as follows:

$$1 + (1+2) + (1 + 2 + 3) + (1 + 2 + 3 + 4) + (1 + 2 + 3 + 4 + 5) + \ldots + (1 + 2 + 3 + \ldots + n)$$

```
Enter n : 1
Sum : 1
```

```
Enter n : 2
Sum : 4
```

```
Enter n : 3
Sum : 10
```

```
Enter n : 5
Sum : 35
```

```
Enter n : 10
Sum : 220
```



## Problem 3.

- Write a code that prints numbers as follows (use **for** loop).

```
Enter n : 1
  1
```

```
Enter n : 2
  1
  2  3
```

```
Enter n : 3
  1
  2  3
  4  5  6
```

```
Enter n : 4
  1
  2  3
  4  5  6
  7  8  9 10
```

```
Enter n : 5
  1
  2  3
  4  5  6
  7  8  9 10
 11 12 13 14 15
```

```
Enter n : 10
  1
  2  3
  4  5  6
  7  8  9 10
 11 12 13 14 15
 16 17 18 19 20 21
 22 23 24 25 26 27 28
 29 30 31 32 33 34 35 36
 37 38 39 40 41 42 43 44 45
 46 47 48 49 50 51 52 53 54 55
```