

## QUIZ 2

ID: 003

Time: 22:00 – 23:30

### Problem 1 – 1 points:

Write a function to calculate the average of all even number which is smaller than N inputted from keyboards

Input	Output
12	6

### Problem 2 – 2 points:

Write a function to print N prime number where N is inputted from keyboard

Input	Output
3	2 3 5

### Problem 3 – 2 points:

Write a function to print N numbers which is in a lucas series. A lucas series is defined as follows:

$$a_0 = a, a_1 = b, a_i = a_{i-1} + a_{i-2}$$

where a, b and N are inputted from keyboard

Input	Output
1 2 4	1 2 3 5

**Problem 4 – 2 points:**

Write a function to check a number N which satisfy the following characteristic or not:

“The multiplication of all digits is twice as the sum of its all digits”

E.g: 36:  $3 \times 6 = 18$ ,  $3 + 6 = 9$  so  $18 = 9 \times 2$

Where N is inputted from keyboard

Input	Output
36	True
37	False

**Problem 5 – 2 points:**

Write a function to concatenate two descending list so that the results are ascending. Do not use the sort algorithm. Do not need to write the input program.

Input	Output
9 3 1 10 2	1 2 3 9 10

**Problem 6 – 1 points:**

Write a function to find the longest ascending sub-array in a list A with N elements where A, N is inputted from keyboards.

Input	Output
9 1 2 3 1 5 6 7 2 3	1 5 6 7

Explanation: we have ascending sub-array: (1,2,3), (1,5,6,7),(2,3)