

## Week 8 (Function)

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### Exercise 1

Write a Python function to find Largest and Smallest number from 3 numbers input from user.

Sample output:

```
User input
First number:5
Second number:12.7
Third number:-4.5
```

```
~Output~
Largest: 12.7
Smallest: -4.5
>>>
```

### Exercise 2

Write a Python program to reverse a string from user input.

```
User input
What's your message? Python

~Output~
Message in reverse order: nohtyP
>>>
```

### Exercise 3

Write a Python function that accepts a string (input) and calculate the number of upper case letters and lower case letters.

### Exercise 4

Write a Python function that accepts student names and marks (store in list).

Calculate the total marks and average based on the input.

Display student names and marks, total and average based on sample out below:

```
Enter name *Separate by commas:Philip,James,Lester, Lucy,Mariam
Enter marks *Separate by commas:57,58,74,70,62

~Output~
Student Name: Philip      | Marks: 57
Student Name: James      | Marks: 58
Student Name: Lester     | Marks: 74
Student Name: Lucy       | Marks: 70
Student Name: Mariam     | Marks: 62
Total of 5 students' marks is: 321
Average is: 64.20
>>>
```

## Exercise 5

Write a Python function to display Odd numbers and Even numbers from user input (store in list).  
Sample output as below:

```
Enter numbers *separate by commas:56,7,8.9,12.6,7.7,-2.5

Even numbers: ~56
Odd numbers: ~7~8.9~12.6~7.7~-2.5
>>> |
```

## Exercise 6

Write a Python “function” for the following output.

Conditions:

There are 5 selections:

[A]ddition, [S]ubtraction, [M]ultiplication, [D]ivision, and [Q]uit to stop the process.

The selection will accept uppercase or lowercase as input (no case-sensitive issue).

Note:Use Python function to store the formulas and accept user input (for first number and second number only).

```
Mathematical Calculator
```

```
[A]ddition
[S]ubtraction
[M]ultiplication
[D]ivision
[Q]uit
```

```
Selection: a
Enter first number:5
Enter second number:6
Addition answer: 11.0
-----
```

```
Mathematical Calculator
```

```
[A]ddition
[S]ubtraction
[M]ultiplication
[D]ivision
[Q]uit
```

```
Selection: d
Enter first number:65
Enter second number:3
Division answer: 21.67
-----
```

```
Mathematical Calculator
```

```
[A]ddition
[S]ubtraction
[M]ultiplication
[D]ivision
[Q]uit
```

```
Selection: q
Thank you!
```

```
Press enter to exit|
```