**Lesson 4:**

* Function and module
* Function call
* Built in functions
* Casting functions
* Random numbers
* Math functions
* Adding new function
* Definition and use
* Function parameters
* **Exercises**

**Note:**

**Built in functions** <https://www.w3schools.com/python/python_ref_functions.asp>

**Casting Functions**

<https://www.w3schools.com/python/python_casting.asp>

**Random numbers**

<https://www.geeksforgeeks.org/random-numbers-in-python/>

random

choice

choices

sample(sequence,k=),

randint(start,end)

randrange(start,end,step) step is optional

uniform(start,end) - float number

**Math functions**

<https://www.w3schools.com/python/module_math.asp>

Exercises:

1. Write a Python function to find the Max of three numbers.
2. Write a Python function to multiply all the numbers in a list.
3. Write a Python program to reverse a string. **Don’t use: text[ : : -1]**
4. Write a Python function that accepts a string and calculate the number of upper case letters and lower case letters.
5. Write a Python function that takes a list and returns a new list with unique elements of the first list.

Sample List : [1,2,3,3,3,3,4,5]  
Unique List : [1, 2, 3, 4, 5]

**6.**Write a Python function that takes a list and returns largest number in a list.

**7.**[**https://leetcode.com/problems/richest-customer-wealth/**](https://leetcode.com/problems/richest-customer-wealth/)

**8.**[**https://leetcode.com/problems/running-sum-of-1d-array**](https://leetcode.com/problems/running-sum-of-1d-array)

**9.**[**https://leetcode.com/problems/defanging-an-ip-address**](https://leetcode.com/problems/defanging-an-ip-address)

**10.**