**Python Basic Exercises**

1. Take two integer values as input and store them in two variables named X and Y. Multiply these two values and store the result in another variable named Z. Print the values of the variables: X, Y and Z.

Input() – is used to take input.

Print() – is used to print a value.

1. Find and print the python version that you are using.

Use sys.version (module sys) or platform.python\_version() (module platform) to find the version.

1. Use the Python command help('modules') to find the available built-in modules.
2. Write a Python program to print a value without a newline or space.
3. Take an integer value as input and determine whether it is an even or odd number. Therefore, print an appropriate message (even/odd).
4. Write a Python program to swap the values of two variables. Try this exercise with and without using a function.
5. Write a Python program to print all even numbers from a given list of numbers in the same order.
6. Take a character as input and determine whether it is a vowel or not. Therefore, print an appropriate message (vowel/not vowel).
7. Write a Python program that accepts a filename from the user and prints the extension of the file.
8. Write a Python program to count the number of occurrences of a specific character in a string.

[try using count()]

1. Write a Python program to filter positive numbers from a list.
2. Write a Python function (user defined/not built-in) to find the maximum and minimum numbers from a sequence of numbers.
3. Write a Python program to find the total number of even and odd numbers from a given list.
4. Write a Python program that will sort the numbers of a given list in both ascending and descending order without modifying the original (given) list.
5. Take a line of text (words separated by spaces) as input and find two words that have the highest and the lowest length.
6. Write a Python program to get the largest and the smallest number from a list.
7. Write a Python program to print a specified list after removing the elements from some specific positions such as removing 0th, 4th and 5th elements from a list of length 6.
8. Define a function that receives a list of values and print all values of the odd indices.
9. Write a Python program to sort (ascending and descending) a dictionary by value or by key.
10. Write a Python program to merge two dictionaries. [may use: copy(), update()]
11. Define a search function that receives a dictionary and a target value. Therefore, check if the target value exists in the dictionary values and return the appropriate key of the dictionary where the target value is found.

Also try to practice programs of Tuples and Sets that we have seen in the lecture.