# Assignments – Set 2

## Instruction:

* Write pseudo-code/comments before each codes. Use ‘#’ to convert the sentence in to comments.

E.g.:- #1st step …

#2nd Step...

* If stuck or in doubt, feel free to Google the concept. ☺
* Whatsapp/call me anytime if you have any doubts.
* If using jupyter notebook, the notebook is saved in .ipnyb format. Submit that file or if using python editor, consolidate all answers in one file and submit.

## Topics Covered:

* List
* String
* Tuple
* Set
* Dictionary
* Function

## Questions:

1. Write a Python program to sum all the items in a list.
2. Write a Python program to multiply all the items in a list.
3. Write a Python program to get the largest number from a list.
4. Write a Python program to get the smallest number from a list.
5. Write a Python program to remove duplicates from a list.
6. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

Sample List: ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']

Expected Output: ['Green', 'White', 'Black']

1. How to convert a list to string.
2. Write a Python program to create a tuple.
3. Write a Python program to add an item in a tuple.
4. Write a Python program to convert a tuple to a string.
5. Write a Python program to check whether an element exists within a tuple.
6. Write a Python program to convert a list to a tuple.
7. Write a Python program to create a set.
8. Write a Python program to iteration over sets.
9. Write a Python program to add member(s) in a set.
10. Write a Python program to remove item(s) from set.
11. Write a Python script to add a key to a dictionary.

Sample Dictionary: {0: 10, 1: 20}

Expected Result: {0: 10, 1: 20, 2: 30}

1. Write a Python script to check if a given key already exists in a dictionary.
2. Write a Python program to iterate over dictionaries using for loops.
3. Write a Python function to find the Max of 2 numbers.
4. Write a Python function to sum all the numbers in a list.

Sample List: (8, 2, 3, 0, 7)

Expected Output: 20

1. Write a Python function to reverse a string.
2. Write a Python program to print the even numbers from a given list.

Sample List: [1, 2, 3, 4, 5, 6, 7, 8, 9]

Expected Result: [2, 4, 6, 8]

1. Write a Python function that checks whether a passed string is palindrome or not.
2. Write a Python function to convert a string in a list.
3. Write a function to find the area of a circle given any radius.
4. Write a function called fizz\_buzz that takes a number.
   * If the number is divisible by 3, it should return “Fizz”.
   * If it is divisible by 5, it should return “Buzz”.
   * If it is divisible by both 3 and 5, it should return “FizzBuzz”.
   * Otherwise, it should return the same number.
5. Write a program (function!) that takes a list and returns a new list that contains all the elements of the first list minus all the duplicates.
6. Write a program that takes a list of numbers (for example, a = [5, 10, 15, 20, 25]) and makes a new list of only the first and last elements of the given list. For practice, write this code inside a function.
7. Take two lists, say for example these two:

a = [1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89]

b = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13]

and write a program/function that returns a list that contains only the elements that are common between the lists (without duplicates).