Zero2Hero#2 Class Assignment #1

I am sharing the assignments to practice the things we learned in the class#1.

## 1. While loop problems:

- a) Write a program to print first 10 integers and their squares using while loop;
- b) Write a program to print the first 10 natural numbers in reverse order using while loop;
- c) Write a program to compute the sum of numbers until a user types zero;
- d) Write a program to compute several inputs from a user and display the largest and smallest values;
- e) Write a program to compute several inputs from a user and display the mean value of the inputted values.

## 2. For loop problems:

- a) Write a program to display numbers from -10 to -1 using for loop;
- b) Write a program to accept a number from a user and calculate the sum of all numbers from 1 to a given number;
- c) Write a program to print all <u>prime numbers</u> between 50 and 100;
- d) Write a program to print the first 15 Fibonacci sequence;
- e) Write a program that computes the factorial of 7 (or any given input integer from a user).

## 3. List/dictionary problems:

- a) Write a program to create a list from elements of a range from 10 to 50 with a step of 5 using list comprehension;
- b) Write a program to create a list that contains squares of the list from 4.a) using list comprehension;
- c) Write a program that to create a list that contains elements greater than 100 of the list from 4.b) using list comprehension;
- d) Given dictionary is consisted of vehicles and their weights in kilograms. di = {"Sedan": 1500, "SUV": 2000, "Pickup": 2500, "Minivan": 1600, "Van": 2400, "Semi": 13600, "Bicycle": 7, "Motorcycle": 110}.
  - Create a list of the names of vehicles with weight below 5000 kgs. Create a list of the values that are larger than 2000 kgs.
- e) In the same list comprehension make the key names all upper case.

After completing, please, upload your scripts to the GitHub repo. I will create a new folder for the assignment #1.