## **Python Assignment**

- 1. Build a game that guesses a number; the computer determines a secret number, and the player shall guess the number. For each guess, the computer tells if the number is too high or too low.
- 2. Generate a random String of length 5. Note: String must be the combination of the UPPER case and lower case letters only. No numbers or a special symbol. You may need to look at the 'string' module, you can use 'string.ascii letters'.
- 3. Generate a random date between given start and end dates. Hint: you may need to look at the 'time' module.
- 4. Search for the 'secret' module and build a program that generates random secure token of 64 bytes and random URL.
- 5. Write a program to output a random even number between 0 and 10 inclusive using random module and list comprehension.
- 6. Write a program to output a random number, which is divisible by 5 and 7, between 10 and 150 inclusive using random module and list comprehension.
- 7. Write a program to generate a list with 5 random numbers between 100 and 200 inclusive. Hint: Use random.sample() to generate a list of random values.
- 8. Write a Python program to find the three elements that sum to zero from a set (array) of n real numbers by using classes.

  For example: Input array: [-25, -10, -7, -3, 2, 4, 8, 10] Output: [[-10, 2, 8],

[-7, -3, 10]]

9. Write a Python class to find a pair of elements (indices of the two numbers) from a given array whose sum equals a specific target number.

Note: There will be one solution for each input and do not use the same element twice.

Ex:

Input: numbers= [10,20,10,40,50,60,70], target=50

Output: 3, 4