**Find Answers and write notes/programs:**

**Section: for/ while loop**

1. What is difference between for loop and while loop in python?
2. How to exit from the loop?
3. How to skip some iteration from the loop?
4. When else part will be executed in loop?
5. How to iterate backward? E.g to print upto 6.
   Like 6,5,4,3,2,1.
   How we can iterate backward on list?

**Dict**:

1. How to create dictionary?
2. How to access data from dictionary? Key, value and both.
3. How to delete element from dictionary?
4. What is purpose of get(), update(), setdefault() methods of dictionary?
5. Write a program to find number of occurences of each character of each letter present in the given string?

**File handling:**

1. Write a program to check whether the given file exist or not. If it is available then print its content?
2.  Write a function in Python to count and display the total number of words in a text file.
3. Write a function in Python to read lines from a text file. Your function should find and display the occurrence of the word "the"
4. Write a function in Python to count uppercase character in a text file.
5. Write a function in Python to count words in a text file those are ending with alphabet "e".

**General:**

1. What are types of arguments?
2. What is decorator? Write a decorator to display function name and print start and end.
3. What is generator? Explain advantages. Write a generator for Fibonacci series.
4. What is difference between shallow copy and deepcopy?
5. How exception handling work in python?

**Very Important Programs:**

1. Write a python program for count character from string after each character is changed.
   e.g. input = 'aaaabahhhhhaaa'   output = a4b1a1h5a3

2. You have a list of N+1 integers between 1 and N. You know there's at least one duplicate, but there might be more. For example, if N=3, your list might be 3, 1, 1, 3 or it might be 1, 3, 2, 2
   Print out a number that appears in the list more than once.