

Module 2: Sequences and File Operations

Assignment 2

edureka!

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Assignment

1. Smith wishes to register in a ticket booking website for booking bus tickets. For authenticate the registration, he needs to provide user-id and password. There are some built-in rules for checking the validity of the passwords entered by the users. Following are the rules for checking the validity of a password:

- i. At least 1 alphabet
- ii. At least 1 digit between [0-9]
- iii. At least 1 character from [@&]
- iv. Minimum length of transaction password: 5
- v. Maximum length of transaction password: 10

2. Write a program for printing all elements of a list and their indexes in the list. Take the list as a user input.
3. Write a program which accepts a string from the console and print the characters that have even indexes if the character is an alphabet. Concatenate the characters and print.

Example: If the following string is given as input to the program:

Ed12ur3ka1Python12

Then, the output of the program should be:

EuaPto

4. Please write a program which accepts a string from console and print it in reverse order.

Example: If the following string is given as input to the program:

welcome to edureka

Then, the output of the program should be:

akerude ot emoclew

5. Please write a program which counts and prints the numbers of each character in a string input by the console.

Example: If the following string is given as input to the program:

abcdefgabc

Then, the output of the program should be:

a,2

c,2

b,2

e,1

d,1

g,1

f,1

6. Given: Lists [1,5,10,12,34,13] and [4,7,8,10,5,13,24].

With the above give lists, write a program to create a new list whose elements are intersection of the above given lists.

7. By using list comprehension, please write a program to print the list after removing the values which are divisible by 6 in [12,24,35,24,88,120,155].

8. By using list comprehension, please write a program to print the list after removing the 1st,3rd,5th numbers in [12,24,35,70,88,120,155].

9. Please write a program to randomly generate a list with 6 numbers, which are divisible by 5 and 7, between 1 and 1500 inclusive.

10. Write a program to compute $\frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \dots + \frac{n}{n+1}$ with a given n input by console (n>0).

Example:

If the following n is given as input to the program:

5

Then, the output of the program should be:

3.55