

CS1101 Assignment2_2021

1. Modify the program given below such that it prints a serial number (starting from 1) followed by your name, 15 times in the terminal.

```
x = "your name"
for i in range(0,10):
    print (i)
```

2. Modify the program which is the solution to Q1 above, such that the printing (a serial number and your name) happen only if the serial number is an integer multiple of 3.

3. Write a program which stores the string "abcdefghijkl" in a variable and then prints the following sequence of strings using a for loop

```
abcdefghijkl
bcdefghijkl
cdefghijkl
defghijkl
efghijkl
fghijkl
ghijkl
hijkl
ijkl
jkl
kl
l
```

4. Write a program which finds the largest item in a *given* numerical list without using the `max` command. To test your program, use the following lists:

[0, 3, 1, 2, 8, 9, 0, 4, 7] and [0, -1, -3, -4, 3, 8, 9, 11, -2]

5. Write a program which finds the largest and the smallest items and their positions in a given list, first *without* using the `max` and `min` commands. Also write the same program using the `max` and `min` commands and verify that both codes give identical results. To test your program, use the following lists: [0, 3, 1, 2, 8, 9, 0, 4, 7] and [0, -1, -3, -4, 3, 8, 9, 11, -2]

6. Read name (e.g. kripa), year of joining (e.g. 2020), course id (e.g. MS), student id (e.g. 1234) and generate the IISER email id in the format name-lastTwoDigitsOfYearOfJoining-courseId-studentId@iiserkol.ac.in. You must first store these fields (e.g. name) in a list and use 'join' operation to convert the list to a string from which the email id will be generated.

7. Consider three strings `str1 = '123'`, `str2 = '234'` and `str3 = '456'` and print the sum, product and average of the numbers in the strings.

8. Input five numbers using a for loop and print the sum of these numbers.

9.a) Take the marks of 10 students in a subject as input from the user and store them in a list.

- b) Sort the marks in descending order.
- c) Give a grace mark of 5 to those marks which are less than 45.
- d) Considering 50 as the pass marks, count the number of cases with failing marks.

10. Take 10 integer numbers from users as input and store them in a list of **numbers**.

- a) Print the entire list.
- b) Sort the list and print.
- c) Remove the maximum and minimum value from the list and then print the updated list

Below are a few challenge questions for practice. These will not be graded.

1. Input your IISER email in format *name-rollno@iiserkol.ac.in*, extract the name, roll no using `split()` and print them.

2. Take your full name as input and make an abbreviation of your name based on the initials of the names.