



INDIAN SCHOOL AL WADI AL KABIR
Worksheet, 2020-21

Class: XI	SUB: Computer Science	Date of Completion: 18-09-2020
Worksheet No:7	TOPIC : Operations on string, nested loop, flow charts Questions-Python programming(3.7.x)	Note: Write in practical record book (FS2QR)

1. Write a python program to do the following task on a string str entered by the user.
 - a) Find out the length of the string
 - b) Find the number of alphabets, digits, spaces, lower- and upper-case letters separately.
 - c) Capitalise the string str.
Print the information with appropriate message.
2. Develop a python program to convert every lower case letter to upper case letter in a string STR1 entered by the user. Also display how many characters are converted to.
3. Read a string S1 from the user .Read another string to be searched in S1 as S2.If found display *found* at the location otherwise display *not found*.
4. Mr. Kamal wants to find out how many times a string ST1 is occurred in the main string ST2. Develop a python code to complete the task to help him.
5. Read a string from the user as STR1 and replace every 'a' with a character read the user in CH1. Store in STR2 and display on screen. Also display the original string STR1(*shows strings are immutable*)
6. Let the student enter his/her full name. Put the name with proper format if it is not in a format.
(ex: **Raj dillon** should as **Raj Dillon**). Use suitable variable/s to do the task.
7. Accept a string from the user as str1. Find out its length and display after removing the blank places from the left, right and both the sides. Store the final string in str2.

8. Develop a python program to check the entered string S1 is a palindrome or not.
(Use while loop to complete the task. Not to use built in functions)

Ex: Malayalam, madam , racecar , naman

9. Read a sentence S1 with 4 words. split the S1 into 4 words as in list. Display the first word, second letter of second word.

10. Display the length of 7/2, 7//2, 17%4, 23/3 separately.

11. Develop a python program to display the following format. (Use nested loop only)

54321	1	2	3	4
5432	5	6	7	8
543	9	10	11	12
54	13	14	15	16
5				

12. Code in python to find the sum of the given series.

$$\text{Sum_series} = 1 - X^3/4! + X^5/6! - X^7/8! + \dots + X^N/(N+1)!$$

13. Draw the six symbols used in the flow chart and also name their functions.

14. Draw a separate flow chart for the following to check the entered number

- Num1 is
- a. Negative odd number
 - b. Perfect number
 - c. Armstrong number.
 - d. Palindrome

15. Find out the errors if any. Rewrite after correcting it. Underline the correction/s Made.

```
For p in range(2,X)
    if K%p==0
        S=s+k
if S==X:
    print("yes")
else:
    print("No")
```