

1. You are given a string and your task is to swap cases. In other words, convert all lowercase letters to uppercase letters and vice versa.(don't use any python built in function)

Example : pHitrOn.iO presents "Python COuRSe".

Ans : **PhITRoN.io PRESENTS "pYTHON coUrsE"**

2. Write a program to print the following number pattern using a loop.

Input : 5

Output :

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

3. Display Fibonacci series up to 10 terms

0 1 1 2 3 5 8 13 21 34

4. Count all uppercase, lowercase, digits, and special symbols from a given

**"P@#yn26at^&i5ve"**

Total counts of chars, digits, and symbols

**Uppercase = 1**

**Lowercase = 7**

**Digits = 3**

**Symbol = 4**

5. Given two strings, s1 and s2. Write a program to create a new string s3 made of the first char of s1, then the last char of s2, Next, the

second char of s1 and second last char of s2, and so on. Any leftover chars go at the end of the result.

**s1 = "Abc"**

**s2 = "Xyz"**

**Output : AzbycX**

6. Write a program to check if one string contains another. For example, the result will be True if all the characters in the s1 are present in s2, otherwise False. The character's position doesn't matter. Take inputs from the user.

**s1 = "Phi"**

**s2 = "Phitron"**

**Output : True**

7. Write a program to check if the given number is a palindrome number.

**Input : 121**

**Output : True**

8. Write a program to display all prime numbers within a range. You will be given two integers l and r . You have to print all the prime numbers present in the given range l and r.

**Input : 25 50**

**Output :**

29

31

37

41

43

47

9. Reverse a given integer number

Given:

76542

Expected output:

24567

10. Write a program to print the following star pattern using the for loop

Input : 5

Output :

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*