

## **Lab 4** **Strings**

### ***Use built-in functions for followings:***

- A. Write a program to display a given string from backward.
- B. Write a program to count number of words in string.
- C. Write a program to concatenate one string contents to another.
- D. Write a program to compare two strings they are exact equal or not.
- E. Write a program to find a substring within a string. If found display its starting position.
- F. Write a program to convert a string in uppercase.
- G. Write a program to convert a string in lowercase.
- H. Calculate number of occurrences of 'a' in a input string using recursion.

### ***Write Python Script for followings (Avoid use of built-in function, if possible)***

1. Write a script to maintain Bank account .There is two types of accounts: Savings account and Current account. Savings account must maintain minimum balance of 1000Rs and current account must maintain 10000RS. Facilities provided are withdrawal, and Deposit.
2. Create a function that writes the Fibonacci series upto n numbers.
3. Write two functions prime() and check() to Check whether the number given by the user is prime or not.
4. Write a function that receives two numbers as an argument and display all prime numbers between these two numbers. Call this function from main ( ).
5. Define a function max() that takes two numbers as arguments and returns the largest of them. Use the if-then-else construct available in Python. (It is true that Python has the max() function built in, but writing it yourself is nevertheless a good exercise.
6. Define a function max\_of\_three() that takes three numbers as arguments and returns the largest of them.
7. Define a function that computes the length of a given string.
8. Write a script to input a string form the user and output the first non repeating character.
9. Write a function that takes a character (i.e. a string of length 1) and returns True if it is a vowel, False otherwise.
10. Write a function translate() that will translate a text into "rovarspraket" (Swedish for "robber's language"). That is, double every consonant and place an occurrence of "o" in between.  
For example, translate("this is fun")  
should return the string "tothohisos isos fofunon".
11. Define a function reverse() that computes the reversal of a string. For example, reverse("I am testing") should return the string "gnitset ma I".

12. Define a function `is_palindrome()` that recognizes palindromes (i.e. words that look the same written backwards).

For example, `is_palindrome("radar")` should return `True`.

13. Write a function `is_member()` that takes a value (i.e. a number, string, etc) `x` and a list of values `a`, and Returns **True** if `x` is a member of `a`, **False** otherwise.

(Note that this is exactly what the `in` operator does, but for the sake of the exercise you should pretend Python did not have this operator.)