

PYTHON PROGRAMMING LAB

Ex 1: Write the python programs to calculate the following

- a) Find the factorial of given number
- b) To print all the prime numbers below n. n value should be taken from the user at the time of execution

Ex 2: Write the python programs to perform the following a) To check given number Armstrong or not.

- b) To check Strong number. c) To print Fibonacci series.

Ex 3: Write the python programs to calculate the following

- a) Write a Python program to get a string from a given string where all occurrences of its first char have been changed to '\$', except the first char itself.
- b) Write a Python program to remove the characters which have odd index values of a given string.
- c) To remove punctuations from the string
- d) Write a Python program to count repeated characters in a string
- e) Write a Python program to count Uppercase, Lowercase, special character and numeric values in a given string

Ex 4: Write the python programs to perform the following

- a) Implement a STACK program by using PYTHON.
- b) Implement a QUEUE program by using PYTHON.
- c) Implement a Python Program for creating a dictionary and display its keys alphabetically.
- d) Write a Python program to convert a list into a nested dictionary of keys.
- e) Write a python program to remove duplicates from the list

Ex 5: Write the python programs to calculate the following

- a) To find HCF or GCD of two numbers
- b) To find sum of natural numbers using recursive function

Ex 6: Write the python programs to perform the following

- a) Read a file line by line into a list
- b) Get filename, line count, file extension, file creation and modification date.
- c) Reads and displays the content of the file
- d) Write a program that inputs a text file. The program should print all of the unique words in the file in alphabetical order.

Ex 7: Write the python programs to calculate the following

- a) Write a python program to define a module to find Fibonacci Numbers and import the module to another program.
- b) Write a python program to define a module and import a specific function in that module to another program.

Ex 8: Write the python programs to calculate the following

- a) Define a class, which have a class parameter and have a same instance parameter.
- b) Define a class named 'Shape' and its subclass 'Square'. The Square class has an 'init' function which takes a given length as an argument. Both classes have an area function which can print the area of the shape, where Shape's area is 0 by default.

Ex 9: Write the python programs to calculate the following

- a) implement Re.findall, re.split, re.sub, re.subn, re.search and Match.group.
- b) Write a Python program to check the validity of a password (input from users). Validation :
 - At least 1 letter between [a-z] and 1 letter between [A-Z].
 - At least 1 number between [0-9].
 - At least 1 character from [\$#@].
 - Minimum length 6 characters.
 - Maximum length 12 characters.