Assignment 1

Till looping

1. Write a python program to find following using looping and decision making without function
    I. Sum of all digits of any numbers
    II. Sum of all even digits of any number
    III. Sum of all odd digits of any number
    IV. Sum of all prime digits
    V. Difference between average of all even digits except divisible by 4 and avearge of all odd digits except divisble by 3
    VI. Find kth digit from frontside or back side of any digits number and find its poistional value
    VII. Sum of product of consecutive digits of any digit number
    VIII. Sum of product of consecutive even digits of any digit number
    IX. Sum of product of consecutive odd digits of any digit number
    X. Sum of product of consecutive prime digits of any digit number
    XI. Difference between Sum of product of consecutive even digits except 2 and 6 and Sum of product of consecutive odd digits except 3 and 7 of any digit number
2. Write a python program to find sum of product of corresponding digits of two any digit number Such as n=1234 m=7896 output=6*4+9*3+8*2+7*1
3. Write a python program to find sum of product of corresponding even digits of first any digit number and corresponding odd digit of any digit number Such as n=1234 m=4567 output=4*7+2*5
4. Write a python program to compute following series and take input x and n
    I. $1-x^2/2! + x^3/3!-x^4/4!+------+x^n/n!$
    II. $x-x^3/3! + x^5/5!-x^7/7!+------+x^n/n!$
    III. $1+x^2/2! + x^4/4!+x^6/6!+------+x^n/n!$
    IV. $x-x^3/3! + x^5/5!-x^7/7!+x^{11}/11!------+x^n/n!$
5. Write a python program compute following series and take a numbers num as input

$$x-x^3/3! + x^5/5!-x^7/7!+------+x^n/n!$$

where x=sum of all even digits except 2 and 8

and n= sum of all odd digits except 1 and 3

list,tuple,dictionary,string,number

1. Write a python program to create a list of prime numbers as per given range
2. Write a python program to find total and average mark of a student and take 5 different subject along with marks of 10 students using dictionary

3. Write a python program to store details of a student like rollno, regdno, name, branch, stream, sem, phone no,address in dictionary and print the details in cv format
4. Write a Python program to print and store ‘n terms of Fibonacci series in list
5. Write a Python program
    I. To add 'ing' at the end of a given string (length should be at least 3). If the given string already ends with 'ing' then add 'ly' instead. If the string length of the given string 5. is less than 3, leave it unchanged. Sample String : 'abc' Expected Result : 'abcing' Sample String : 'string' C 220.2 Expected Result : 'stringly'
    II. To get a string from a given string where all occurrences of its first char have been changed to '$', except the first char itself.
6. Write a python program to store names of 10 fruits in strings and sort in alphabetical order
7. Write a python program to find difference between average of all even numbers except divisible by 4 and average of all odd numbers except divisible by 5 in a list of user defined 20 values?
8. Write a python program to find 1^{st},2^{nd} and 3^{rd} largest and smallest numbers in a list 20 user defined values.
9. Write a python program to find repeated numbers as well as frequency of repetition of numbers in a list of 20 user defined values?
10. Write a python program to create a tuple of constants values like pi and exponent and use them to find area and perimeter of circle?
11. WAP to do following using string

a) Check whether a string is palindrome or not

b) capitalize first and last character of each word in string

c) categories the password as low medium and high

low – only numbers or alphabets and length less than 8

medium- number and alphabets and length more than 8

string- number, alphabet and special character should present and length should be greater than 8

d) Find the letter used maximum and minimum time in a string

e) create a list to store unique character in string and another list to store frequency of repeatation of unique character available in first list in the string

f) find and count number of words starts and ends with vowels in a string of multiple words

g) create a list using names of 10 cities and pincodes. Combine them all to convert it into string using join with delimiter “:”. Modify the names of cities by adding state-cities in the string. Finally split it to have the information in list in the format state-city-pincode.