

Assignment 2

Happy Dushara to all of you.

**Complete all the assignment through your own mind not using internet.
You can consult with me through whatsapp or phone anytime for any
problem. Do not hesitate at all.**

1. Write a java 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 average of all odd digits except divisible by 3
 - VI. Find kth digit from front side or back side of any digits number and find its positional 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 java 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 java 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 java program to compute following series and take input x and n
 - I. $1-x^2/2! + x^3/3! - x^4/4! + \dots + x^n/n!$
 - II. $x-x^3/3! + x^5/5! - x^7/7! + \dots + x^n/n!$
 - III. $1+x^2/2! + x^4/4! + x^6/6! + \dots + x^n/n!$
 - IV. $x-x^3/3! + x^5/5! - x^7/7! + x^{11}/11! - \dots + x^n/n!$
5. Write a java program compute following series and take a numbers num as input

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

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

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

6. Write a java program to check weather the given number is palindrome and prime or not?

7. Write a java program to find factorial of a number using while loop, do while loop and for loop all in one program?[hint use switch block]?

8. Write a program to find following data of student using mark of four subjects like C, C++, Java, and Python. Mark of 4 subjects will be accepted at the run time and credit of all the mentioned subject is 3?

- a) Grade of 4 subjects?
- b) Total Mark and %age of mark secured by Students?
- c) SGPA of Student?

9. Write a program to find factorial of difference between greatest and smallest number among 3 numbers?

10. Write a program to generate Fibonacci series up to n terms? Value of n will be accepted from user?

11. Write a program to perform following using the numbers in between 23 to 249?

- a) find number of even numbers that ends with 0 and 4?
- b) find number of odd numbers that ends with 5 and 7?
- c) find number of prime numbers?
- d) find number of palindrome numbers?
- e) find difference between average of palindrome and prime numbers?
- f) find GCD and LCM of all even numbers?
- g) find GCD and LCM of all odd numbers?
- h) Check whether the difference between largest even number and smallest odd number is palindrome or not?
- i) find first five largest even number and smallest odd number?
- j) find the sum of product of corresponding digits of 2nd largest even number and 3rd smallest odd number?

12. Write a java program to find following of 10 numbers using command line arguments? Do not use array?

- a) find difference between greatest and smallest number?
- b) find difference between average of all odd numbers and even numbers?