

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 $n=1234$ $m=7896$ $\text{output}=6*4+9*3+8*2+7*1$
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 $n=1234$ $m=4567$ $\text{output}=4*7+2*5$
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?