

**204-Programming Skills (206-Practicals)**

1. Write a Menu base C program with following options.
  1. Addition of two Matrices.
  2. Subtraction of two Matrices.
  3. Multiplication of two Matrices.
  4. Transpose of Single Matrix.
  5. Exit.
2. Write a C program that creates structure Employee with id, name and salary. Enter data of five employees. Display data of those employees whose salary is less than 15000.
3. Write a C structure volume with fields: liter and millilitre. Read the value of two volumes and add them, if the value of millilitre is more than 1000 then add it to liter value.
4. Write a C program to sort numeric array in ascending or descending order using UDF.
5. Write a C program to sort elements in Lexicographical order (dictionary order).
6. Write a C Program to find Sum of Series  $1^2+2^2+3^2+.....+n^2$  Using Recursion.
7. Write a C program to check the given string is palindrome or not using UDF.
8. Write a python program to display reverse number. E.g. I/p => 1234 o/p => 4321
9. Write a python program to print factorial of n numbers using while loop.
10. Write a python program to Fibonacci series of n numbers using while loop.
11. Write a python program to create choice based menu for calculator operations.
12. Write a python function to check whether the entered number is Armstrong or not.
13. Write a python program to converts all the characters of a Lower Case to Upper Case and Upper Case to Lower Case.
14. Write a python program to count total number of times a Specified value appears in given string.
15. Write a python program to add and remove element from the list.
16. Write a Python program to sum all the items in a list.
17. Write a python program that store characters of a word as List elements and removes vowels from the list.  
Example:  
Old List: ['p','r','o','g','r','a','m']  
New List: ['p','r','g','r','m']
18. Write a python program to check if an item exists in a tuple or not.
19. Write a python program to print the third, fourth, and fifth item in the tuple.(Use a range of indexes)
20. Write a python program to add multiple items 'more\_fruits' to the fruits set.  
fruits = {"apple", "banana", "cherry"}  
more\_fruits = ["orange", "mango", "grapes"]
21. Write a python program to update the dictionary values entered by user.
22. Write a Python program to Calculate mean() value of Following Data. (Numpy)  
data1 = [11, 13, 14, 15, 17, 12].
23. Write a python program create a simple (pandas) dataframe with a list of tuples with following column names: 'Roll No', 'Student Name', 'Age', 'Course'

**Note: Submission date will be declared later on.**

1. Students are requested to write all the programs in a project paper.
2. At the End of each program it's **compulsory** to write proper Output.
3. Punching and Page numbering should be in proper format.
4. Journal **Second page** should be Index with all proper details.



5. Journal **First Page** must contain following details.  
(Roll No, Name, Class, Division, Subject and College Name)
6. **No** late submission will be accepted.

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**Date: 20-01-2023**