

# National College of Computer Studies (NCCS)

## BIM First Semester: C programming lab assignment 4

1. WAP to take two numbers from user and one arithmetic operator (+, -, \*, /, %) and perform the corresponding operation of those two numbers by using switch case.
2. WAP to take the options from the user for Save(S), Open(O), Exit (E) and print the corresponding message like “you want to open the file?” by using switch case.
3. WAP to print “NCCS” 10 times using **while**, **do..while** and **for**.
4. WAP to print numbers from 201 to 299 using all the three loops.
5. WAP to find sum of odd numbers and even numbers from 1 to 100.
6. WAP that asks an integer number n and calculate sum of all natural numbers from 1 to n using all available loops. Also calculate average.
7. WAP to add two numbers and display their sum. The program must ask next two numbers and add till user wants.
8. WAP to read a number and display the multiplication table of that number in the following format:  
  
If user input is 5 then output must be:  
  
5 x 1 = 5  
5 x 2 = 10  
.....  
.....  
5 x 10 = 50
9. WAP that reads a number from user & calculate the factorial of that number.
10. WAP to read two numbers and calculate its power. ( $x^y$ )
11. WAP to read a number and check whether it is prime or not.
12. WAP to input the number and find the sum of each digit.
13. WAP to read a number & find whether it is:
  - a. Armstrong or not
  - b. Palindrome or not
14. WAP to find all the Armstrong numbers between 100 – 500.
15. WAP to read the age of 10 person and count the number of person of age group 50 to 60.
16. WAP to find the leap year between 1900 to 2022.

17. WAP to accept any number 'n' & print the cube of all numbers from 1 to n, which is exactly divisible by 3.

Compiled by: Ujjwol Shakya

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18. WAP to find Fibonacci series upto  $n^{\text{th}}$  terms.

19. WAP to print the following series:

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1      1      1      4 5 1 2      5 5 5 4      A B C D
1      2      1      3 4      4 4 4 3      E
1      2      0      1 2 3      3 3
2      3      1      1 2      2 2
1      3      0      1      1
2      3      1

3      4 4 4 4      1 0 1 0
1 2 3 4      5 5 5 5      1 0 1 0 1
1 2 3 4 5

A B C D      5 E E E E      E E E E E
E      E      1 1
E      2      5      A B C
      3      5      A B C D
      A      B      A      B
      B      2 2      C C C
      A      3 3      D D D D E
      D D      3      E E E E
      D D      4 4 4
      C C      4 5 5
      C      5 5 5
      B B      B

```

20. WAP that will read two numbers ,display the following menu:

### Menu

- c. Summation
- d. Sum of squares
- e. Sum of cubes
- f. Product

And perform task as per user's choice (use switch statement)

21. WAP to calculate the factorial of given number by using 'goto' statement. 22. WAP to find the number of and sum of all integers greater than 100 and less than 200 that are exactly

divisible by 7 but not by 5.

23. WAP to add first seven terms of the following series using for loop.

$$1/1! + 2/2! + 3/3! + \dots + n/n!$$

24. WAP to display the squares of the integers from 1 to 100 except numbers divisible by 11.

(use continue statement).

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