Exercise- c programming

1. Write a program to swap values of two variables using a temporary variable.
2. Write a program to swap values of two variables without using a temporary variable.
3. Write a program to find largest of three numbers without using any decision making statement/ conditional operator.

Exercise-

1. Write a C program to check whether two matrices are equal or not.
2. Write a C program to find sum of each row and column of a matrix.
3. Write a C program to find sum of main diagonal elements of a matrix.

Exercise-

1. Write a program to check armstrong and perfect numbers using the functions.
2. Write a program in C to find the sum of the series 1!/1+2!/2+3!/3+4!/4+5!/5 using the function.
3. Write a C program to check whether a number is palindrome or not using function.
4. Write a C program to find sum of digits of a given number using function.
5. Write a C program to find all prime numbers between given interval using functions.

Exercise-

* 1. Write a C program to find maximum between three numbers.
  2. Write a C program to check whether a number is negative, positive or zero.
  3. Write a C program to check whether a character is alphabet or not.
  4. Write a C program to find the eligibility of admission for a professional course based on the following criteria:

Eligibility Criteria : Marks in Maths >=65 and Marks in Phy >=55 and Marks in Chem>=50 and Total in all three subject >=190 or Total in Maths and Physics >=140

Exercise-

1. Write a program to list numbers from 1 to 500 which are divisible by 7 and 9.
2. Write a program in C to read 10 numbers from keyboard and find their sum and average.
3. Write a program in C to display the sum of the series [ 9 + 99 + 999 + 9999 ...].
4. Write a program to list first 10 items of Fibonacci series.
5. Write a program to test whether the given number is prime.

Exercise-

1. Write a program to reverse digits of a number.
2. Write a program to add digits of a number.
3. Write a program to test whether the given number is an Armstrong number.

Exercise-

1. Write a program to display multiplication table of numbers from 1 to 10.
2. Write a program to list Armstrong numbers from 1 to 500.
3. Write a program to list perfect numbers from 1 to 500. (A **perfect number** is a number that is equal to the sum of its proper divisors. For **example**, the divisors of **6** are 1, 2 and 3. The sum of the proper divisors of **6** is 1 + 2 + 3 = 6, which is a perfect number.)

Exercise-

1. Write a C program to print all natural numbers in reverse (from n to 1).
2. [Write a C program to print all odd number between 1 to 100.](https://codeforwin.org/2015/06/c-program-to-print-all-odd--numbers-between-1-to-100.html)
3. [Write a C program to calculate product of digits of a number](https://codeforwin.org/2015/06/c-program-to-calculate-product-of-digits.html).
4. Write a program to keep asking for a number until you enter a negative number. At the end, print the sum of all entered numbers.

Exercise-

1. Write a program to calculate the sum and average of positive numbers using goto statement. If the user enters a negative number, the sum and average are displayed.
2. Write a program to print multiplication table of number using goto statement.
3. Write a program to display first 10 elements of Fibonacci series using goto statement.

Exercise-

1. Write a C program print total number of days in a month using switch case.
2. Write a C program to find maximum between two numbers using switch case.
3. Write a C program to check whether a number is positive, negative or zero using switch case.
4. Write a program to calculate the area of different geometrical figures like Circle, triangle, square, and rectangle.
5. Write a program to swap the values of two numbers if the values of both variables are not the same using a switch statement.

Exercise

1. Write a program in C to read n number of values in an array and display it in reverse order.
2. Write a program in C to print all unique elements in an array.
3. Write a program in C to merge two arrays of same size.
4. Write a program in C to find the maximum and minimum element in an array.
5. Write a program in C to find the second largest element in an array.

Exercise-

1. Write a C program print total number of days in a month using switch case.
2. Write a C program to find maximum between two numbers using switch case.
3. Write a C program to check whether a number is positive, negative or zero using switch case.
4. Write a program to calculate the area of different geometrical figures like Circle, triangle, square, and rectangle.

Write a program to swap the values of two numbers if the values of both variables are not the same using a switch statement.

1. Write a program in C to read n number of values in an array and display it in reverse order.
2. Write a program in C to print all unique elements in an array.
3. Write a program in C to merge two arrays of same size.
4. Write a program in C to find the maximum and minimum element in an array.
5. Write a program in C to find the second largest element in an array.
6. Write a C program to check whether two matrices are equal or not.
7. Write a C program to find sum of each row and column of a matrix.
8. Write a C program to find sum of main diagonal elements of a matrix.

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Sub- Computer Programming

Question Bank for Assignment No – 1

1. Write a program to add first and last digit of a four digit number.
2. Write a program to find largest of three numbers without using any decision making statement or ternary operator.
3. [Write a program to check whether a number is divisible by 5 and 11 or not.](https://codeforwin.org/2015/05/c-program-to-check-whether-number-is-divisible-by-5-and-11.html)
4. Write a program to read 10 numbers from keyboard and find their sum and average.
5. Write a program to find the number and sum of all integers between 100 and 200 which are divisible by 9.
6. Write a program to print ASCII values and their equivalent characters.
7. [Write a program to calculate product of digits of a number](https://techstudy.org/cLanguage/Write-C-program-to-calculate-product-of-digits-of-a-number).
8. [Write a program to enter a number and print its reverse](https://codeforwin.org/2015/06/c-program-to-find-reverse-of-any-number.html) using while loop.
9. Write a program to calculate power of number using while loop.
10. Write a program to find the sum of the series 1 +11 + 111 + 1111 +11111
11. Write a program to find sum of the square of all natural numbers from 1 to N.  
    Series: 1^2+2^2+3^2+4^2+..N^2
12. Write a program to find the sum of Natural Number/Factorial of Number of all natural numbers from 1 to N

Series: 1/1! + 2/2! + 3/3! + 4/4! + ... N/N!

1. Write a program to display the n terms of harmonic series and their sum

1 + 1/2 + 1/3 + 1/4 + 1/5 ... 1/n terms  
(Test Data :  
Input the number of terms : 5  
Expected Output :  
1/1 + 1/2 + 1/3 + 1/4 + 1/5 +  
Sum of Series upto 5 terms : 2.283334)

1. [Write a program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:](https://codeforwin.org/2015/05/c-program-to-enter-student-marks-and-calculate-percentage-and-grade.html)

Percentage >= 90% : Grade A  
Percentage >= 80% : Grade B  
Percentage >= 70% : Grade C  
Percentage >= 60% : Grade D  
Percentage >= 40% : Grade E  
Percentage <40% : Grade F

1. [Write a program to enter a number and print it in words.](https://codeforwin.org/2015/06/c-program-to-print-numbers-in-words.html)
2. [Write a program to read weekday number and print weekday name using switch.](https://www.includehelp.com/c-programs/print-weekday-name-using-switch.aspx)
3. Write a [program to check whether a character is VOWEL or CONSONANT using switch.](https://www.includehelp.com/c-programs/check-vowel-consonant-using-switch.aspx)
4. [Write a program to check whether a number is Armstrong number or not.](https://codeforwin.org/2015/06/c-program-to-check-armstrong-number.html)
5. [Write a program to find all factors of a number](https://codeforwin.org/2015/06/c-program-to-print-factors-of-any-number.html).
6. Write a program to generate 10 random numbers within the range 1 to 100 and test them whether they are prime numbers or not.
7. [Write a program to find sum of all prime numbers between 1 to n](https://codeforwin.org/2015/06/c-program-to-find-sum-of-all-prime.html).
8. [Write a C program to print all Perfect numbers between 1 to n](https://codeforwin.org/2015/06/c-program-to-print-all-perfect-numbers-between-1-to-n.html).

(Perfect number is a positive integer which is equal to the sum of its proper positive divisors.

For example: 6 is the first perfect number  
Proper divisors of 6 are 1, 2, 3  
Sum of its proper divisors = 1 + 2 + 3 = 6.  
Hence 6 is a perfect number.

)

1. [Write a C program to print all Strong numbers between 1 to n](https://codeforwin.org/2015/06/c-program-to-print-all-strong-numbers.html).

(Strong number is a special number whose sum of factorial of digits is equal to the original number. For example: 145 is strong number. Since, 1! + 4! + 5! = 145

Strong numbers between 1-1000: - 1, 2, 145)

# Practical question

1. X.◊Z,Z◊Y,Y◊1. Write a program to rotate values of variables X, Y, Z such that X
2. WAP to find the largest of three number using nested if statement.
3. Write a program to find factorial of a number.
4. WAP to add digit of a number.
5. Write a program to list prime numbers from 1 to 500 using for statement.
6. Write a program to test whether given number is palindrome using do while statement.
7. Write a program to test number is an Armstrong number using if and go to statement.
8. Write a program to find square, square root, cube, cube root using switch case
9. Write a program to search a number in the given array.
10. Write a program to multiply matrix A with B.
11. Write a program to test whether given number is prime using function.
12. Write a program to demonstrate call by value parameter passing technique.
13. Write a program to demonstrate call by reference parameter passing technique.
14. Write a recursive program to test whether given number is prime.
15. Write a program to display strong number from n to m by command line argument.
16. Write a program to sort an array using pointer.
17. Write a program to demonstrate nested structure.
18. Write a program to demonstrate bit fields in a structure.
19. Write a program to copy one file into another file.

# Tutorial 2

1. WAP to test whether the number for odd or even using shift operator
2. WAP to test whether the no is multiple of 4 using shift operator
3. WAP to swap values of two variables using bitwise EXOR operator.
4. WAP to find cube of no by defining a macro.
5. WAP to find largest of three no by defining multiline macro
6. WAP to find sum of 1 st and alst of a four digit no.

# TUTORIAL 3

1. WAP to calculate power of number using for loop.
2. Write a program to print Fibonacci series upto n term using while statement
3. WAP to calculate product of digit of number using do while loop.

# TUTORIAL 4

1. WAP to print the table of factorial using do while / while statement .
2. WAP to print Armstrong numbers from 1 to 500 using do while /while statement.
3. WAP to multiply digit of a number using do while / while statement .

# TUTORIAL 5

1. WAP to search a value stored in array and return the index of the corresponding array element.
2. WAP to find smallest and largest value stored in an array.
3. WAP to compare two integer array for similarity.
4. WAP to find 2nd largest no stored in array.
5. Create 2 array A and B. WAP to merge array B in array A.

# TUTORIAL 6

1. WAP to count number of character and number of vowels available in sentence.
2. WAP to sort characters in a word.
3. Create character array of 10 names and write a program to arrange the name in the ascending order.

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Sub- Computer Programming

Question Bank for Assignment No – 2

1. Write a program to find maximum and minimum of n numbers using functions
2. Write a program to [check even odd using functions](https://codeforwin.org/2016/02/c-program-to-check-even-or-odd-using-functions.html)
3. Write a program to check whether the given numbers is a prime number using function.
4. Write a program to [find all prime numbers within the given range using functions](https://codeforwin.org/2016/02/c-program-to-find-prime-numbers-between-two-intervals-using-function.html)
5. Write a program to [find all strong numbers within the given range using functions](https://codeforwin.org/2016/03/c-program-to-find-all-strong-numbers-between-two-interval-using-function.html)
6. Write a program to [find all armstrong numbers within the given range using functions](https://codeforwin.org/2016/03/c-program-to-print-armstrong-numbers-between-1-to-n-using-function.html)
7. Write a program to find all perfect numbers within the given range using functions
8. Write a program to [find power of a number using recursion](https://codeforwin.org/2016/02/c-program-to-find-power-of-any-number-using-recursion.html)
9. Write a program to [print natural numbers upto n using recursion](https://codeforwin.org/2016/02/c-program-to-print-all-natural-numbers-in-given-range-using-recursion.html)
10. Write a program to [print even first 10 numbers using recursion](https://codeforwin.org/2016/03/c-program-to-print-even-odd-numbers-using-recursion.html)
11. Write a program to find [sum of first 20 natural numbers using recursion](https://codeforwin.org/2016/02/c-program-to-find-sum-of-natural-numbers-using-recursion.html)
12. Write a program to find [sum of even/odd numbers using recursion](https://codeforwin.org/2016/03/c-program-to-find-sum-of-even-odd-number-using-recursion.html)
13. Write a program to [find reverse of a number using recursion](https://codeforwin.org/2016/03/c-program-to-find-reverse-of-number-using-recursion.html)
14. Write a program to [check whether the given number is palindrome using recursion](https://codeforwin.org/2016/03/c-program-to-check-palindrome-number-using-recursion.html)
15. Write a program to [find sum of digits of a number using recursion](https://codeforwin.org/2016/03/c-program-to-calculate-sum-of-digits-using-recursion.html)
16. Write a program to [insert new element in array](https://codeforwin.org/2015/07/c-program-to-insert-element-in-array.html)
17. Write a program to [delete an element from array](https://codeforwin.org/2015/07/c-program-to-delete-element-from-array.html)
18. Write a program to [find frequency of array elements](https://codeforwin.org/2015/07/c-program-to-find-frequency-of-each-element-in-array.html)
19. Write a program to [reverse an array](https://codeforwin.org/2015/07/c-program-to-find-reverse-of-array.html)
20. Write a program to [convert lowercase string to uppercase](https://codeforwin.org/2015/04/c-program-convert-lower-case-string-to-upper.html) string
21. Write a program to [check whether the string is palindrome](https://codeforwin.org/2015/04/c-program-to-check-palindrome.html)
22. Write a program to [trim whitespace from string](https://codeforwin.org/2016/04/c-program-to-trim-both-leading-and-trailing-white-spaces-in-string.html)
23. Write a  [program to change string to upper case without strupr](https://techstudy.org/cLanguage/C-program-to-change-string-to-upper-case-without-strupr)
24. [write a program to change string to lower case without strlwr](https://techstudy.org/cLanguage/C-program-to-change-string-to-lower-case-without-strlwr)
25. [write a program to count number of alphabets, digits and special characters in string](https://techstudy.org/cLanguage/C-Program-to-count-number-of-alphabets-digits-and-special-characters-in-string)
26. [write a program to store information in structure and display it](https://techstudy.org/cLanguage/Write-a-C-program-to-Store-Information-in-Structure-and-Display-it)
27. [write a program to add two distances in inch-feet system using structure](https://techstudy.org/cLanguage/Write-a-C-program-to-add-two-distances-in-inch-feet-system-using-Structure)

MC22F14F024--> Q.Nos.[2, 3, 6, 8, 10, 11, 15, 18, 24, 27]