1. Write an algorithm and C program that accepts two integers from the user as input and calculates the sum, diference, product, quotient and remainder applying different arithmetic operators between two integers using the concept of switch statement and odd loop.
2. Write a C program to read the score of student and print the grade according to score as:

Score>=80, “Distinction”

Score from 70 to less than 80 “ First Division” Score from 55 to less than 70 “ Second Division” Sore from 40 to less than 55 “Third Division” Score less than 40, “ Fail”

1. Write a C program to find the sum of first 100 natural numbers using loop.
2. Write a program in C to display the multiplication table of 1 to n where n is input number.
3. Write algorithm and program to compute the followings using for, do while and while loop separately.
   1. factorial of an integer N
   2. b. computation of ab( a raised to power b)
4. Write a program in C to make following pattersn of astrisk(\*) below using loop.

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1. 13. Write a program using loop to print the following floyd's triangle as given below when input is n.

1

2 3

4 5 6

7 8 9 10

11 12 13 14 up to n rows

1. Write a program to get input of two 3x3 matrices and find out the sum and product of the matrices and display the result of sum and product.
2. WAP to find sum of diagonal elements of a square matrix.
3. Write a program to sort an array in ascending order.
4. Write a program to find smallest element in an array.
5. WAP to check whether a given number is Armstrong number or not.
6. WAP to check whether a given number is palindrome or not.
7. WAP to display first 50 prime numbers.
8. WAP to change a given string to Uppercase without using library function.
9. WAP to change a given string to Uppercase without using library function.
10. WAP to check whether a given string is palindrome or not without using library function.
11. Write a program to get a string as input and print the length of string, reverse of the string.
    1. Using String Library Function
    2. Using your own function
12. Write a program that takes input of two numbers and any one operator in(+,-,\*,/ ,%) as input and pass those numbers and an operator to the function. The function should calculate the result of two numbers as indicated by operator and return the result . Display the result of computation in your program.
13. Write a program to find factorial of given integer using recursion.
14. Write a program to find first 10 numbers in Fibonacci series using recursion.
15. Write a program to find umber a times a vowel ‘e’ appears in a given string.
16. Write a program defining an array with dynamic memory allocation of integers and compute the sum of the array using function of your own.
17. Write a program to swap two numbers defining a function swap(int, int ) using:

a) Pass by value

b) Pass by reference

1. Write a program defining a structure to store the data for a student with fields( rollno, f\_name, l\_name, address, mobileno) , input the data for a student and display the record in appropriate format.
2. Write a program to pass array to a function using pointer and return array from a function using pointer.
3. Write a program that illustrates the similarity between array and pointer.
4. Write a program using array of structure to store the data for 10 employees with fields( Essn, f\_name, l\_name, address, mobileno) , input the data for n employeess and display the record in appropriate format.
5. Write a program defining a union to store the data for a student with fields( rollno, f\_name, l\_name, address, mobileno). Illustrate the property of Union by accessing only one data member at a time.
6. Write a program to prompt user to input filename and read the content of file and display in screen.
7. Write a program to read from a text file and count the number of lines and characters in that file.
8. Write a program to read a text file and copy all contents in the new file.

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