

Pattern:

- N
NE
NEP
NEPA
NEPAL
- 5 4 3 2 1
5 4 3 2
5 4 3
5 4
5

3.

```
      *
    * * *
  * * * * *
* * * * * * *
* * * * * * *
```

4. * * * * * * * * *

```
* * * * * * *
  * * * * *
    * * * * *
      * * *
        *
```

5. \$ * \$ *

* \$ * \$

\$ * \$ *

* \$ * \$

Structure:

- Write a program with structure "Students" to contain name, faculty, email, and total marks obtained. Develop a program to read data for 5 students and display the overall detail of students rank wise with respect to total marks.
- Write a program, using structure to input records of 5 students. Members include name, roll number, and marks obtained in math, C programming and English. Display the records of students who have passed in C programming.
- Define a structure data type called time-struct containing three members hour, minute and second. Develop a program that would assign values to the individual members and display the time in the form 16:40:51. **LEFT**
- Write a program to input 5 employee records (Emp_id, Emp_name and Emp_Salary). Display 3 employee information who gets the highest salary.
- W Write a program to input 5 employee records (Emp_id, Emp_name and Emp_Salary). Display employee information whose name starts with 'D'.

String:

- Write a program to print ASCII values of each and every character of the string given by the user.
- Write a program to reverse a string without using string handling function.
- Write a program to compare whether two strings are identical or not without using string handling function.
- Write a program to count no of spaces, vowels in a sentence input by the user.
- Write a program to convert a lower case string to upper case string without using string handling function.
- Write a program to combine two different words into one without using string handling function (e.g.: word 1: kist, word 2: college, Result: kist college)

Array:

- Write a program to take 10 numbers from user and only display numbers which are prime.
- Write a program to take 10 numbers from user and arrange them in reverse order.
- Write a program to take 10 numbers from user and count how many even and odd numbers are present.
- Write a program to take 3x3 matrix input from user and calculate sum of diagonal elements.
- Write a program to take 3x3 matrix input from user and calculate sum of four corners element.
- Write a program to take two 3X3 matrix, add them and display transpose of final result.
- Write a program to take 10 numbers from user and display the numbers in ascending order, counting total number of digits which are odd.

Recursion:

- Write a program to find sum of Natural Numbers Using Recursion.
- Write a program to generate Fibonacci Series using recursion.
- Write a program to find the power of a given number using recursion.
- Write a program to find factorial of a given number using recursion.

DMA:

- Write a program using DMA to take 10 numbers from user and only display numbers which aren't prime.
- Write a program using DMA to take 10 numbers from user and arrange them in reverse order.
- Write a program using DMA to take 10 numbers from user and find sum of all 10 digits, and check whether sum is palindrome or not.
- Write a program using DMA to take 10 numbers from user and find sum of all 10 digits, and check whether sum is Armstrong or not.

Pointers:

- Write a program to add all the even numbers in an array and display result using pointers only.
- Write a program to find highest value amongst 10 numbers given by user using pointers.
- Write a program to enter 10 numbers and calculate even and odd numbers count using pointers only.
- Write a program to add two arrays and count number of odd numbers in the final result using pointers only,

Function:

- Write a program using function to check whether number is prime or not. (with value, with return).
- Write a program using function to swap two numbers by passing pointers.

(with value, with return)

- Write a program using function to check whether number is Armstrong or not by passing pointers. (with value, with return)
- Write a program to check whether number is Armstrong or not using function. (with value, with return).

Graphics:

40.

41.

42.

43.

•

45.

File Handling:

- Write a program to enter records in a file with members as id, name and salary. Develop a program to read the file and find out employee highest salary.