1. **Write a C program to swap two values using pointers.**

2. **Write a program to calculate average of numbers between m and n using pointer.**

3. **Write a program in C to find the maximum number between two numbers using a pointer.**

4. **Write a program in C to sort an array using Pointer.**

5. **Write a program in C to add and subtract two numbers at run time.**

6. **Write a C program to store information of n number of students using structure.**

7. **Write a C program to add two distances (in inch-feet system) using structure.**

8. **Write a C program to store information of a student using structure.**

9. **Define a recursive & non recursive function to calculate the sum of n natural numbers.**

10. **Define a recursive & non recursive function to calculate the factorial of a number.**

11. **Write a C program to calculate the transpose of a matrix.**

12. **Write a C program to check the length of a string.**

13. **Write a C program to show the reverse of a string without using library function.**

14. **Write a program in C to determine whether an entered character is a vowel or not.**

15. **Write a program to check whether a string is palindrome or not.**

16. **Write a C program to print the following pattern:**
**A B C D E**
**A B C D**
**A B C**
**A B**
**A**

**17.** Write a C program to print the following pattern:

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

**18.** Write a C program to print the following pattern:

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

**19.** Write a C program to print the following pattern:

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

**20.** Write a C program to print the following pattern:

A
B C
D E F
G H I J

**21.** Write a C program to print the following pattern:

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

**22.** Write a C program to print the following pattern:

1
2 3
4 5 6
7 8 9 10

**23.** Write a C Program to check whether the given number is Armstrong or not.

**24.** Write a C Program to check whether the given number is palindrome or not.

25. **Write a C Program to check whether the given input is vowel or consonant using switch case.**

26. **Write a c program to calculate the sum of n natural numbers using while loop.**

27. **Write a program in C to determine if an entered is leap year or not.**

28. **Write a program in C to determine whether a number is prime or not.**

29. **Write a program in C to determine whether a number is odd or even.**

30. **Write a program to find whether a number is prime or not.**

31. **Write a program to swap two integers without using 3rd variable.**

32. **Draw a program to calculate the maximum of three numbers.**

33. **Write a program to convert the temperature from Celsius to Fahrenheit and vice-versa.**

34. **Write a program to swap two integers with using 3rd variable.**

35. **Write a program to calculate the length of a string without using strlen() function.**

36. **Write a program to concatenate two strings without using strcat() function.**

37. **Write a program to calculate the reverse of a string without using strrev() function.**

38. **Write a program to print the following pattern:**
@
@ @
@ @ @
@ @ @ @

39. **Write a program in C to calculate 2nd minimum number among three numbers using conditional statements.**

40. **Write a program in C to calculate the factorial of a number using Recursion.**

41. **Write a program in C to find the largest and smallest element in an Array.**

42. **Write a program in C to perform addition and subtraction of two matrices.**

**43. Write a program in C to find Sum of n input numbers using Array.**

**44. Write a program in C to sort the values of an array.**

**45. Write a program in C to search a particular data element from an array.**