1. Write a program in C++ to find the last prime number that occurs before the entered number.

2. Write a program in C++ to find the Greatest Common Divisor (GCD) of two numbers.

3. Write a program in C++ to find the LCM of any two numbers.

4. Write a program in C++ to enter any number and print all factors of the number.

5. What will be the output ?

```
float f = 10.5;
float p = 2.5;
float* ptr = &f;
 (*ptr)++;
 *ptr = p;
 cout << *ptr << " " << f << " " << p;
```

6. Write a program in C++ to find the number and sum of all integers between 100 and 200 which are divisible by 9.

7. Write a C++ program to input electricity unit charge and calculate the total electricity bill according to the given condition:
   For first 50 units Rs. 0.50/unit
   For next 100 units Rs. 0.75/unit
   For next 100 units Rs. 1.20/unit
   For unit above 250 Rs. 1.50/unit

8. Write a C++ function to find the prime elements from an array (if don't get any element then return 0)
.

9. Write a program in C++ to display the number in reverse order.

10. Write a program in C++ to calculate the product of the digits of any number.

11. Write a C++ program to sort an array of elements using the Selection sort algorithm.

12. Write a C++ program to sort an array of elements using the Bubble sort algorithm.

13. Write a C++ program to sort an array of elements using the Insertion sort algorithm.

14. Write a C++ program that performs a Linear search to find a specific element in an array of integers.

15. Write a C++ program that performs a Binary search to find a specific element in an array of integers.

16.

Print this graph by using this array - {2,1,4,7,5,11}.

17. Write a C++ program to Remove Duplicates From Sorted Array.

18. Write a C++ program to Remove Duplicates From Unsorted Array.

19. Write a C++ program to insert an element at first and last position in array.

20. Write a C++ program to count the number of occurrences of a given number in a sorted array of integers.