Interview Questions:

1. What are the differences between references and pointers?

2. What is the difference between array and pointer?

3. What is a pointer ? when Should we use it ?

4. Explain the use of pointers?

5. Explain what happens when a pointer is deleted twice ?

6. What is NULL pointer?

7. What is NULL pointer and void pointer and what is their use?

8. What is Dangling pointer?

9. What is a smart pointer?

10. Difference between an inspector and a mutator ?

11. Pointer to constant vs. pointer constant ?

12. What are function pointers?

13. What is pointer to member?

14. What is const pointer and const reference?

15. What is memory leak? Why it should be avoided?

16. What are local static variables? What is their use?

17. What is difference between i++ and ++i?

18. What is volatile keyword?

19. Can a variable be both const and volatile?

20. **Explain what is the use of void main () in C++ language?**

21. **What is the difference between #import and #include in C++?**

22. **What is the use of dot in C++?**

23. **How is new() different from malloc()?**

24. **Is it possible to have a recursive inline function in C++?**

25. **What is a responder chain?**

26. **What do you mean by delegate? Can a user retain delegates?**

27. **What is Dynamic and Static Typing?**

28. **What is a static member?**

29. **What are virtual functions – Write an example?**

30. **What are VTABLE and VPTR?**

31. **What do you mean by function and operator overloading in C++?**

32. **Differentiate between a constructor and a destructor in C++.**

33. **Explain the properties and principles of OOP.**

34. **Explain what is COPY CONSTRUCTOR and what is it used for?**

35. **C++ support multiple inheritance. What is the "diamond problem" that can occur with multiple inheritance? Give an example.**

Program:

1. Write a Program to reverse a string without using String inbuilt function.
2. Write a Program to swap two numbers using the third variable.
3. Write a Program to swap two numbers without using the third variable.
4. Write a Program to count the number of words in a string using HashMap.
5. Write a Program to iterate HashMap using While and advance for loop.
6. Write a Program to find whether a number is prime or not.