

1. Explain the principles of Object-Oriented Programming (OOP) with suitable examples.
2. Discuss data abstraction and encapsulation with real-life examples
3. What are Default Arguments? Mention their Advantages and Disadvantages.
4. What are the data types in C++? Explain
5. Why is reusability an important feature of OOP?
6. Explain important features of Object Oriented Programming.
7. Define parameterized constructor by taking a C++ program.
8. List and explain the key features of OOP with suitable examples.
9. What are the unique advantages of an object-oriented programming paradigm
10. Define a class. Explain about class specification.
11. What are access or visibility specifiers in c++, Give example.
12. List and explain the four main pillars of OOP : Encapsulation, Inheritance, Polymorphism, Abstraction
13. Give the comparison of C and C++.
14. Let a tuple $f = \langle \text{MyInt1}, \text{MyFloat1}, \text{MyInt2}, f(), \sim f() \rangle$ be such that MyInt1 is visible only in f , MyFloat1, MyInt2 is visible from all possible code. An int main() is written such that object of f is created and during running the object in main a string "Good Morning" is printed on a screen and literals MyFloat1= 12.5, MyInt2 = 12 while MyInt1 is initialized to 10 along with object being created. Write object oriented programming Using C++ keywords, ethics and coding sections. (Tip: A tuple, is an ordered and finite list of elements in various fields of interest, including computing.)
15. Create a C++ program that defines a class "Student" with attributes (name, roll number, marks) and member functions to accept and display details.
16. What is a structure of c++ program
17. Explain structure of C++ program with suitable example
18. List and explain the key features of OOP with suitable examples.
19. What are objects and classes in OOP? How are they related?
20. Write a program to demonstrate the use of a copy constructor in C++.
21. Describe the mechanism of accessing data, members and member function s in the following cases
 - a) Inside the main function
 - b) Inside member function of the same class
 - c) Inside member function of the another class
22. Create a class "Rectangle" with a parameterized constructor, and find the area by initializing values through a constructor.
23. Explain the term constructor and destructor in c++.
24. Explain following keywords: Public, Protected, Class, new

25. Implement a default constructor in a class and show how it is called automatically.
26. Write a program to find the area of circle using constructor
27. Write a short note on a message passing in OOP.
28. Explain with example parameterized constructor in c++.
29. Let a tuple $f = \langle \text{MyInt1}, \text{MyFloat1}, \text{MyInt2}, f(), \sim f() \rangle$ be such that MyInt1 is visible only in f , MyFloat1 , MyInt2 is visible from all possible code. An `int main()` is written such that object of f is created and during running the object in main a string "Good Morning" is printed on a screen and literals are initialized to $\text{MyInt1} = 10$, $\text{MyFloat1} = 12.5$, $\text{MyInt2} = 12$ using $f()$. Write object oriented programming Using C++ keywords, ethics and coding sections. (Tip: A tuple, is an ordered and finite list of elements in various fields of interest, including computing.)
30. Explain the following constructors with suitable example: Default constructor, Parameterized constructor
31. What are builtin and user defined data types in C++.
32. Explain with example class and object of a class.
33. Let a tuple $f = \langle \text{MyInt1}, \text{MyFloat1}, \text{MyInt2}, f(), \sim f() \rangle$ be such that MyInt1 is visible only in f , MyFloat1 , MyInt2 is visible from all possible code. An `int main()` is written such that object of f is created and during running the object in main a string "Good Morning" is printed on a screen and literals $\text{MyFloat1} = 12.5$, $\text{MyInt2} = 12$ while MyInt1 is initialized to 10 along with object being created using constructor overriding. Write object oriented programming Using C++ keywords, ethics and coding sections.
34. Implement a C++ program to copy the contents of one object to another using a copy constructor.
35. What are objects and classes in OOP? How are they related?
36. What are access or visibility specifiers in c++, Give example.
37. Let a tuple $f = \langle \text{MyInt1}, \text{MyFloat1}, \text{MyInt2}, f(), \sim f() \rangle$ be such that MyInt1 is visible only in f , MyFloat1 , MyInt2 is visible from all possible code. An `int main()` is written such that object of f is created and during running the object in main a string "Good Morning" is printed on a screen and literals are initialized to $\text{MyInt1} = 10$, $\text{MyFloat1} = 12.5$, $\text{MyInt2} = 12$ using $f()$. Write object oriented programming Using C++ keywords, ethics and coding sections. (Tip: A tuple, is an ordered and finite list of elements in various fields of interest, including computing.)
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41. Let a tuple $f = \langle \text{MyInt1}, \text{MyFloat1}, \text{MyInt2}, f(), \sim f() \rangle$ be such that MyInt1 is visible only in f , MyFloat1 , MyInt2 is visible from all possible code. An `int main()` is written such that object of f is created and during running the object in `main` a string “Good Morning” is printed on a screen and literals $\text{MyFloat1} = 12.5$, $\text{MyInt2} = 12$ while MyInt1 is initialized to 10 along with object being created using parameterized constructor. Write object oriented programming Using C++ keywords, ethics and coding sections. Differentiate between parameterized constructor and a copy constructor using above example. (Tip: A tuple, is an ordered and finite list of elements in various fields of interest, including computing.)