

C++ Interview Questions and Answers Pdf

Question: 1

What is C++?

C++ is an object oriented programming language created by **Bjarne Stroustrup**.

C++ maintains almost all aspects of the C language, while simplifying memory management and adding several features – including a new data type known as a class to allow object oriented programming.

C++ maintains the features of C which allowed for low level access but also gives the programmer new tools to simplify memory management.

Question: 2

What is Object Oriented Programming?

Object Oriented Programming (OOP) is a programming paradigm where the complete software operates as a bunch of objects talking to each other.

An object is a collection of data and methods that operate on its data.

Question: 3

What are the main features of OOP?

The main features of OOP:

Encapsulation

Polymorphism

Inheritance

Question: 4

What are advantages of OOP?

The main advantage of OOP is better manageable code that covers following

The overall understanding of the software is increases as the distance between the language spoken by developers and that spoken by users.

Object orientation eases maintenance by the use of encapsulation.

One can easily change the underlying representation by keeping the methods same.

OOP paradigm is mainly useful for relatively big software.

Question: 5

What do you mean by inheritance?

Inheritance is the process of creating new classes, called derived classes, from existing classes or base classes.

The derived class inherits all the capabilities of the base class, but can add embellishments and refinements of its own.

Question: 6

What is namespace?

Namespace allows us to group a set of global classes, objects and/or functions under a name.

To say it somehow, they serve to split the global scope in sub scopes known as namespace.

Question: 7

What is an object?

Object is a software bundle of variables and related methods. Objects have state and behavior.

Question: 8

What is polymorphism?

Poly means **many** and morph means **form**. Polymorphism is the ability of an object (or reference) to assume (be replaced by) or become many different forms of object.

Question: 9

What is scope resolution operator?

A scope resolution operator (::), can be used to define the member functions of a class outside the class.

Question: 10

What are virtual functions?

Virtual functions are used with inheritance, they are called according to the type of object pointed or referred, not according to the type of pointer or reference. In other words, virtual functions are resolved late, at runtime. Virtual keyword is used to make a function virtual.

C++ program with runtime polymorphism (use of virtual functions)

A base class and a derived class.

A function with same name in base class and derived class.

A pointer or reference of base class type pointing or referring to an object of derived class.