C++ Interview Questions for Experienced Pdf

Question: 1

How are the operators classified?

Operators are classified as

Arithmetic,

Assignment,

Component Selection,

Logical,

Manipulator,

Member dereferencing,

Memory Management,

Preprocessor,

Relational,

Scope Resolution,

Shift and

Type Cast

Question: 2

What is the impact of modifiers?

Unsigned modifiers the range of the integer values as the sign bit is also used to store data.

Long increases the bytes for a particular data type, thus increasing the range of values.

Question: 3

What do you mean by pure virtual functions?

Pure virtual function in object oriented programming is called as virtual method that acts as a function allowing its behavior to be overridden by the class that is inheriting the pure virtual function with the same signature.

This is used in case of polymorphism. It is used when a base class is being driven by the derived class and an object of the derived class referred as base or derived class and an object of the derived class referred to base or derived class type.

When a derived class overrides the base class method then the output or the behavior will be called as ambiguous. To use the virtual function a virtual keyword is used. This allows the function to be defined in every derived class and use the functionality.

Question: 4

What are the differences between references and pointers?

Both references and pointers can be used to change local variables of one function inside another function. Both of them can also to save copying of big objects when passed as arguments to functions or returned from functions, to get efficiency again.

References are less powerful than pointers

Once a reference is created, it cannot be later made to reference another object; it cannot be reseated. This is often done with pointers.

References cannot be NULL. Pointers are often made NULL to indicate that they are not pointing to any valid thing.

A reference must be initialized when declared. There is no such restriction with pointers.

References are safer and easier to use:

Safer: Since references must be initialized, wild references like wild pointers are unlikely to exist. It is still possible to have references that don't refer to a valid location.

Easier to use: References don't need referencing operator to access the value. They can be used like normal variables. '&' operator is needed only at the time of declaration. Also, members of

an object reference can be accessed with dot operator ('.'), unlike pointers where arrow operator (->) is needed to access members.

What is encapsulation?

Packaging an object's variables within its methods is called encapsulation.

What is template?

Templates allow to create generic functions that admit any data type as parameters and return value without having to overload the function with all the possible data types. Until certain point they fulfill the functionality of a macro. Its prototype is any of the two following ones:

template function_declaration;

template function_declaration;

The only difference between both prototypes is the use of keyword class or typename, its use is indistinct since both expression have exactly the same meaning and behave exactly the same way.

What are the divisions in integral type?

The divisions in Integral type are int and char. Integral is the integer data type. It cannot hold fractional values. Char is character data type that can hold both the character data and the integer data.

What are the operators used only by the preprocessor?

The operators # and ## are used only by the preprocessor.

How can the special character be represented?

Special characters are represented using escape sequences. Escape sequences are represented using characters prefixed with a backslash.

What is storage class and how many storage specifiers are there?

Storage class is another qualifier (like long or unsigned) that can be added to a variable declaration. There are four storage specifiers, they are auto, static, extern and register.