



Passing class object as the function argument

To pass a class object as an argument in C++, you can declare the function parameter as the class type. The class object can be passed using call by value, call by address, and call by reference methods.

Passing class object using call by value

This is the default method for passing class objects onto the function. A copy of the actual argument object is stored in the formal argument object. If we change the values of the data members of the formal argument object then the data members of the actual argument object are unaffected.

Passing class object using call by address

In this technique, the address of the actual argument object is passed from the function call and stored in the formal argument, a pointer to the class object. If we change the values of the data members using the pointer to the object in the formal argument then the data members of the actual argument objects are affected (changed).

Note: We can change the formal argument pointer, to point to a different object in the function definition.

Passing class object using call by reference

In this technique, the formal argument is a reference to the class object. When we call the function and pass an object as the argument then the formal argument becomes a reference to the actual argument. If we change the values of the data members using the reference (formal argument) then the data members of the actual argument object are affected (changed).

Note: We cannot change the formal argument reference, to refer to a different object in the function definition.