

Multiple Inheritance

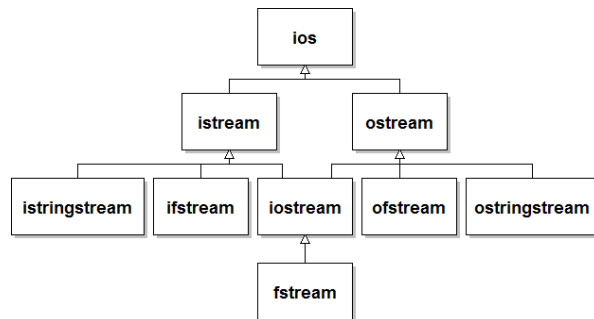
C++ includes a capability known as **multiple inheritance**, which allows a class to be derived from two (or more) base classes. Multiple inheritance lets you create a class **AmphibiousVehicle** from the parents **LandVehicle** and **WaterVehicle**.



An **AmphibiousVehicle** inherits wheels or treads from its **LandVehicle** parent, and a prop or screw and rudder from its **WaterVehicle** parent. You can't do this in Java, because Java classes can have only one parent class.

The standard stream libraries include classes that are **both** input and output streams. The **fstream** class at the bottom is an **iostream**, which is in turn—if you follow the arrow leading up and to the left—an **istream**.

The **fstream** class therefore inherits all the member functions that pertain to **istream** objects. If you instead follow the arrow up and to the right, you discover that the **fstream** class is an **ostream**, which means that it inherits these member functions as well.



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