

1. Code compiles and the member function in the derived class gets called, because the signature of the member function in derived class matches the one in base class, so the member function in base class gets overridden.
2. Same behavior with #1, since the member function in base class is already marked with virtual, marking it on the derived class does not matter.
3. Same behavior with #1 and #2, member function from base class is overridden, because we specified override on the declaration and the signature matches.
4. Code compiles and the member function from base class gets called, because the name is misspelled the compiler cannot find a matching function in base class to override.
5. Code does not compile, with the error “only virtual member functions can be marked 'override'”, because the name is misspelled and we marked override here, the compiler failed to find a function in base class to override so it throws the error.
6. Similar behavior with #1, code compiles and member function in derived class gets called. Although the member function in base class is not marked with virtual, the member function in derived class has the same signature, so the compiler knows to call the function in the derived class, and not the one from base class.
7. Same behavior with #6, marking the member with virtual does not change how the program behaves.
8. Code does not compile, because the member function in the base class is not marked with virtual, we are unable to override it, since override requires a virtual member function.
9. Similar behavior with #4, code compiles and member function from base class gets called. Because the function is misspelled, compiler cannot find a matching member function in derived class so it calls the function in base class.
10. Code does not compile, since we misspelled the function here, compiler cannot find a matching virtual member function in the base class to override, and even if it finds it, it will have the behavior in #8 that non-virtual functions cannot get overridden.