

FH Joanneum (Embedded Computing): WS2022/2023 (Questions About Code)

C++ Inheritance

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C++ Inheritance

Given the following class definitions:

What would the following code output?

Code	Output
<pre>Base b; std::cout << b.method() << std::endl;</pre>	
<pre>Derived d; std::cout << d.method() << std::endl;</pre>	
<pre>Derived d; Base* b = &d; std::cout << b->method() << std::endl;</pre>	

- OO, Polymorphism

- <https://www.faschingbauer.me/trainings/material/soup/cxx03/100-inheritance-oo-design/basics.html>
- <https://www.faschingbauer.me/trainings/material/soup/cxx03/100-inheritance-oo-design/virtual-method.html>
- <https://www.faschingbauer.me/trainings/material/soup/cxx03/100-inheritance-oo-design/polymorphism.html>
- <https://www.faschingbauer.me/trainings/material/soup/cxx03/100-inheritance-oo-design/destructor.html>
- <https://www.faschingbauer.me/trainings/material/soup/cxx03/100-inheritance-oo-design/virtual-destructor.html>
- <https://www.faschingbauer.me/trainings/material/soup/cxx03/100-inheritance-oo-design/interface.html>

- Base/Derived w/o virtual

- What's the effect of ... Base b; b.method();
- What's the effect of ... Derived d; d.method();

- w/ virtual

- What's the effect of ... Base b; b.method();
- What's the effect of ... Derived d; d.method();
- How would you fix the problem? (-> virtual = 0)
- Where's the leak?

- Patterns, UML

- Sketch -> Implementation Sketch on Paper

- STL code questions jjj

- Which output would the following code produce?
- What's wrong with the following code?