

CSCI3180 Principles of Programming Languages

--- Declaration ---

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Assignment 2

Name: CHOW Wai Kwong, Kyle

Student ID: 1155074568

Email Addr: s1155074568@link.cuhk.edu.hk

Question 1.

Duck typing can work the same as polymorphism, but it can work without inheritance. And also, it is not easy to cause compilation error. But polymorphism with inheritance is stricter. Therefore, with duck typing may be easy to have runtime error, vice versa, inheritance may be easy to have compilation error.

Question 2.

If we need to check whether the parent class exist specific data member or member function, ruby provides a useful function [`respond_to?()`] so that we can easy to get the answer by this function. However, in C++, there are not exist such kind of function. We need to based on Run-time type information by using dynamic casting to simulate the function in Ruby. And this kind of method in C++ is not exactly doing what ruby have done, but it is using another principle to obtain the same goal.