

CS310: Paradigms of Programming

Homework 3

1. Should constructors in base classes be made virtual? What about destructors?
2. Write a generic Stack class and then derive StackInt and StackFloat from it. State the advantages and disadvantages of this approach vs. the template approach.
3. List the different uses of "const" in C++ with examples.
4. Write a max function to find the maximum of two inputs. State the advantages and disadvantages of using a macro vs. an inline function for the same.
5. Why should the operator "=" return a reference to *this?
6. State the advantages and disadvantages of using a default parameter vs. overloaded functions.
7. Is it a good practice to return a reference to internal data members via functions? Explain.
8. Explain how and when implicit type casts are done and used by C++.