CS 336 – Assignment 7

1. Suppose someone designed a stack abstract data type in which the function top returned an access path (or pointer) rather than returning a copy of the top element. This is not a true data abstraction. Why? Give an example that illustrates the problem. ***10 PTS***

2. Explain the dangers of C's approach to encapsulation. ***10 PTS***

3. What are the arguments for and against the C++ policy on inlining of methods? ***10 PTS***

4. Describe the three ways a client can reference a name from a namespace in C++. ***10 PTS***

5. Explain the ways subclasses can be created that are not subtypes. ***10 PTS***

6. Compare the class entity access controls of C++ and Java. ***10 PTS***

7. Explain the two problems with abstract data types that are ameliorated by inheritance. ***10 PTS***

8. Explain why allowing a class to implement multiple interfaces in Java and C# does not create the same problems that multiple inheritance in C++ creates. ***10 PTS***