CS 3723: Programming Languages
Apr 25, 2012

You Name:

1. Which of the following statements is *NOT* true regarding the memory layout of a C++/Java class object?
   (a) All the virtual methods are collected into a separate table called vtable.
   (b) A pointer to the vtable is stored before all data members of the object.
   (c) All members of the base class appear before members of the derived class.
   (d) When a derived class overwrites the implementation of a base class virtual method, multiple entries are maintained for the alternative implementations in the vtable.
2. Which statement correctly formulates the challenges of supporting multiple inheritance in a C++/Java class object?
   (a) A separate view must be created for each base class, and the object address may need to be changed when casting it to a base class type.
   (b) The starting location of the *this* pointer needs to be saved for each virtual method implementation.
   (c) The compiler must resolve naming conflicts from different base classes.
   (d) All of the above.