Assignment 2 – Part II

Does my program work correctly, or does it misbehave! WHY?

Correctness: The output display is correct because the method *copyFlyingObjects()* scans through an array of *FlyingObjects* and returns a deep copy of this array.

The copy is indeed a deep copy because each element of the copy array is a new object with the same name and attributes as the original object, instead of just pointing to its address. The reason why is because the method *copyFlyingObjects()* calls a method (*copyObject()*) that allows the different sub classes to override it and copy the object using their own copy constructors. This is permitted using polymorphism.

Notice that the method *copyFlyingObjects()* does not look for the type of the object. Instead, using polymorphism, the compiler recognizes the type of object passing and finds the method *copyObject()* of that type.