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Part I:

A-

```
public interface A{
   void f();
   void g();
   void h();
}
```

B-

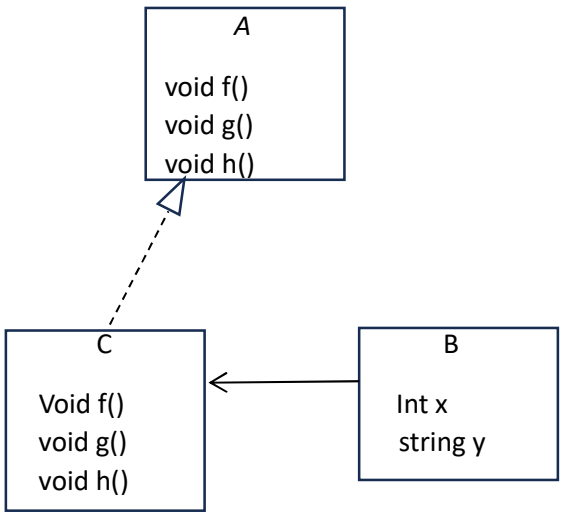
```
public class B extends C{
   int x;
   string y;

   public B(){};
   public B(int x, string y){};
}

public class C implements A{
   public C(){};

   public void f(){};
   public void g(){};
   public void h(){};
}
```

C-



D- We know that A is an interface and has the functions f, g and h in them because the last three lines of the code have the objects of type A calling those functions. We know that B is a type of C because we declare object b1 of type C but set it equal to a new B object. And because we create new B and C objects to put in the array of A objects, we know they must implement A and because B already has to extend C that means C can implement A and B will also get A's functions from C's implementation.

Part II D-

Because we implemented our own checks inside the compareTo() functions of Plane and Train, if an object that is not a matching type to the calling object is passed in the function returns 0. The sort will then think they are the same object and not move them.