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COMP-249 Assignment 2

Does the Output Work Correctly?

Part I: Find Least and Most Expensive Aircraft

Investigate the output of your program! You will need to submit a separate document (pdf, MS-Word, or text) along with your assignment indicating **whether or not the shown display from** the ***findLeastAndMostExpensiveAircraft()* is correct. In either case, you need to explain the reason for the correctness or failure of your program's behavior/output.**

In the first part of the assignment, my static method name: findLeastAndMostExpensiveAircraft displays the correct output. This method takes in an array of type Object (So that any type of object can be looked at) and returns a String. I used multiple variables and set them to 0: count, minPosition, maxPosition, lowestPrice, and highestPrice and then followed with 1 for loop in the method. It was arranged so that every object in the array will be looked at without surpassing its maximum number of indexes, followed by the int i incrementing after each iteration. In the for loop, I then made an if statement to first verify whether or not the object at the index i is an Aircraft using instanceof. If it is one, then I incremented the count, created an aircraft object and assigned it to the object we are evaluating so that we can compare its price. Then in another if statement, I first tested whether the price of the aircraft was lower than the price of the previous one then adjusted its new or the same amounts and its position. I then did the same for find the highest priced aircraft. Out of the for loops I again used if statements. So, if the count hadn’t changed it signified that there were no aircrafts in the array, then the other statements would print out the contents of the least expensive followed by the most expensive in the array.

Part II: Copy The Objects

This method that takes in an array of objects and returns an array of objects with technicality does work, meaning its output is identical with that of the orginal array. The main step back however, is that polymorphism is not in play, and if the copy constructor for some of the classes for example is nonexistant, creating a logical error in which the copied objects obtain the same address as the original objects in the array but not any of the original attributes, therefore creating an error which is why using a clone method for each class would then fix the problem.