

Answer the following questions about the `ArrayOfObjects` demo program and the class lecture notes.

1. What is the purpose of the `currentID` static property in the `Student` class?
2. What would be the downside to generating a random integer between 1 and 1000 and assigning that as a `Student` object's `myID` property in the default constructor?
3. Why is the `"\n"` used in the `System.out.print` statement in one of the `for` loops in the client class?
4. Rewrite the `if` statement control expression `roster[j].getSchedule()[2].equals("Calculus")` so the third `for` loop in the client class finds how many students are taking "Econ" as their **very first** class each day?
5. Write a double-nested `for` loop code segment similar to the one in the client class to count & display how many students are taking both "History" and "Java". You may declare extra local variables.