Tutorial 8

These questions refer to the lectures presented in week 8 of Object Oriented Programming with Java. They will be covered during the tutorial during week 9.

Input and Output

1. What is a stream? Why do we use them?

2. What are coupling and cohesion? Give examples of of an object with high cohesion. Given an example of a set of object that are highly coupled.

3. What is the System class? What are the three streams associated with it?

4. How do print and format work?

5. What kind of input does System.in give? Which method retrieves that input?

6. Why do we is System.in use rarely by itself?

7. What class do you use to wrap System.in if you want to read streams?

8. Why do you write an InputStreamReader in a BufferedReader?

9. What two methods can you use to read from a BufferedReader?

10. Write a method that reads you name and prints "Hello " followed by your name.

11. What method do you use to parse a number from a string?

12. What does a StringTokenizer do?

13. What are the three methods that a StringTokenizer has?

Developing Console Input and Output

14. What is the advantage of automated testing?

15. What is a string stream? Why is is helpful in testing?

16. How do you create a PrintStream that will print to a string?

17. How do you test output with a PrintStream that is built on top of a ByteArrayOutputStream?

18. How do you create a BufferedReader from a String?

19. What is the advantage of fake input and output?

20. What is the advantage of encapsulating input and output?

21. How do you create a class that is mentioned in a test in Eclipse? That is, what is the option in suggestions Eclipse gives you?

22. Given a class that redefines in, out and err, your do you initialize them in the constructor?

23. Write a definition of readline() that returns a string in an I/O class.

24. How do you run JUnit tests in Eclipse?

25. What does is mean to refactor a class?

26. What is a Scanner object? What are its two methods?

Refactoring Console Input/Output

27. Why is refactoring different when you need to change a design decision?

28. Why is it better to have each object print itself?

29. When you have the input and output of all of the classes, is this an example of low cohesion or high coupling?

30. What is a Java Bean?