Tutorial 9

These questions refer to the lectures presented in week 9 of Object Oriented Programming with Java. They will be covered during the tutorial during week 10.

File Input and Output

1. What are the two ways of accessing files?
2. What are the two ways in which information is represented?
3. How do you create a new File object?
4. List six methods in the File class.
5. What are two advantages of using tests to learn a new feature in Java?
6. Explain how unit tests can be used as a specification. What is the advantage of using unit tests as a specification?
7. How do you check the type of an object in Java?
8. When do you refactor a new method from a set of old methods?
9. How do you refactor a new method from a set of old methods?
10. What is idempotence?
11. Why is it important to clean up after test? How do you use the @After methods to do so?
12. Write a Java expression that will create a PrintStream from a File.
13. Why do you close files when you are done with them?
14. Write a Java expression that will create a Buffered reader from a File.
15. How do you extract a method using Eclipse?
16. Name three advantages of refactoring by extracting methods?
17. How do you read numbers or tokens from a File?

Types of Streams

18. Name four types of data streams. How do they differ?
19. What are the advantages of character streams over byte streams?
20. What are the advantages of buffered streams over unbuffered streams?
21. What does a Scanner do?
22. Write Java code to create a new Scanner.
23. Is PrintStream Buffered? Is it a character or byte stream?

24. Why do you need to flush buffered streams?
25. What is a data stream?
26. Write a java expression that will create a data stream.
27. List three methods on a Data Stream.
28. What is an Object Stream?

Package java.nio

29. How does java.nio differ from java.io?
30. What is a channel?
31. List four types of channels and what they are used for.
32. What is a java.nio.Path?
33. What can you do with a java.nio.Path