

Tutorial 1

These questions refer to the lectures presented in week 1 of Object Oriented Programming with Java. They will be covered during the tutorial during week 2.

From C to Java

1. Why do you already know most of Java syntax?
2. List two Java output commands. What do they do? How do they differ?
3. What does “Hello “ + “world.” product?
4. How do you read an integer in Java?
5. What is the difference between a reference and a pointer?
6. What are the similarities between a reference and a pointer?
7. Can you create a memory leak with a reference?
8. What do private and public mean in Java?
9. What is an Object in Java?
10. What is an instance variable in Java?
11. What is a method in Java?
12. What is a class in Java?
13. What is a constructor in Java? What does it do?
14. What is the relationship between classes and objects?
15. What does the keyword “this” mean in Java?
16. How are variables formatted in Java?
17. What is a Java package?
18. What is the purpose of packages in Java?
19. Where does the main() method go in Java?
20. How many main() methods may a program have in Java?

Setting up Eclipse

21. What is an IDE?
22. What are the steps to creating a new project in Eclipse?
23. What are the steps to adding a new class in Eclipse?
24. What is test driven development?

25. How do you set up your Eclipse project to do Test Driven Development?
26. What are the steps to adding a JUnit test to your test folder?

TDD with Java and Eclipse

27. What are the five steps of Test Driven Development?
28. In JUnit 4 what signals that a method is a test?
29. What does Control-`<Space>` do?
30. What does Control-1 do?
31. That does the work TODO do?
32. What visibility should a constructor function be given?
33. What is the name of the Tab that shows all of the TODOs?
34. How do you run a JUnit test?
35. Where are the results of the JUnit test displayed?
36. How do you add getter and setter methods?
37. How do you choose to add only getter methods? Only setter methods?
38. How do you check the value of a variable in JUnit?
39. How do you turn a class into a program?
40. What is the difference between system testing and unit testing?
41. What is System?
42. What is the out in System.out?
43. How do you run a program in Eclipse?
44. What type of parameter does System.out.println take?
45. What type of parameter does the main method take?
46. What does the toString method do?
47. What does it mean to override a method?
48. Where is the toString method defined initial? Where is it overridden?
49. What is inheritance in Java?
50. What is a super class?
51. How do you specify inheritance when defining a class using Eclipse?