

Question Sheet 1

Name: _____ ID: _____

These questions do not have a formal, definitive answer. They are meant to be food for thoughts. Feel free to seek answers on browsing the Internet, talking to other software developers or reading books.

1. *Barbara Liskov* got the Turing Award of 2008. What are her accomplishments, and what do they have to do with software development?
2. What is a type? What are the Java types `int`, `bool` and `double`? How can we describe these types?
3. Which other types we find in a language, beside primitive types? How to describe these other, non-primitive types?
4. In general we say that the description of an Abstract Data Type should not be over-specific. Why?

26. One of the main differences between object oriented software development is the way to attack problems. We say that in OO development we solve problems in a more “bottom-up” way, whereas in structured development we do things top-down. Illustrate the differences between these two approaches by showing how to develop a compiler in either way.

27. Compare the relative advantages of the top-down and the bottom-up approaches of software development.

28. An important part of any software development activity is the development environment. Give examples of such environments. Which features a productive environment should have?