

Software Testing, Autumn 2005

Exercises I

07.11.-11.11.2005

1. To what extent does testing provide support for the analysis or measurement of the different dimensions of software quality (portability, reusability, interoperability, maintainability, flexibility, testability, correctness, reliability, efficiency, integrity, usability)?
2. What is the relation of testing and inspections as quality assurance methods? What kinds of software defects are easier to find by testing than by inspections? What kinds of software defects are easier to find by inspections than by testing?

As a source of software inspections, use any textbook on software engineering or the following journal (available both in paper format and in electronic format in the online materials of the Kumpula Science Library):

IEEE Software 20, 4 (July / August), 2003. Special Issue on Software Inspection.

3. What are the main benefits and drawbacks of the *V model* of software testing?
4. What are the main difficulties in software testing?

Use the following article as source (available both in paper format and in electronic format in the online materials of the Kumpula Science Library):

J. A. Whittaker: What Is Software Testing? And Why Is It So Hard? *IEEE Software* 17, 1 (January / February), 2000, 70-79.