1.4.2_6 Test execution

- Execute the test suites and individual test cases, following our test proce dures. We might do this manually or by using test execution tools, accord ing to the planned sequence.

- Log the outcome of test execution and record the identities and versions of the software under test, test tools and testware. We must know exactly what tests we used against what version of the software; we must report defects against specific versions; and the test log we keep provides an audit trail.

- Compare actual results (what happened when we ran the tests) with expected results (what we anticipated would happen).

- Where there are differences between actual and expected results, report discrepancies as incidents. We analyze them to gather further details about the defect, reporting additional information on the problem, identify the causes of the defect, and differentiate between problems in the software and other products under test and any defects in test data, in test documents, or mistakes in the way we exe cuted the test. We would want to log the latter in order to improve the testing itself.

- Repeat test activities as a result of action taken for each discrepancy. We need to re-execute tests that previously failed in order to confirm a fix (confirmation testing or re-testing). We execute corrected tests and suites if there were defects in our tests. We test corrected software again to ensure that the defect was indeed fixed correctly (confirmation test) and that the programmers did not introduce defects in unchanged areas of the software and that fixing a defect did not uncover other defects (regression testing).