Black-box Testing

Testing
- Should be based on the customer requirements.
- Cannot be exhaustive, but must be thorough.
- Testing should be planned long before the actual testing of the software product begins.

Black-box testing - test the core functionality of the program to ensure it satisfies all requirements, without taking into account program’s control flow structure (as white-box testing does).

The goal is to verify that the program correctly accepts all input and produces the right output in all input categories.

Good test case:
- **Has a high probability of finding an error.** Design tests that probe different possible causes of program failure. (Experience helps to identify different causes.)
- **Is not redundant.** Every test should have a different purpose (even if the difference is very subtle).

Exercise: Identify a set of test cases for verifying the correctness of the electrical bill calculation program from Handout 4.