PROMPT Software Testing

Test design techniques

Test Design Techniques

Software artifact → Test design technique → Test cases
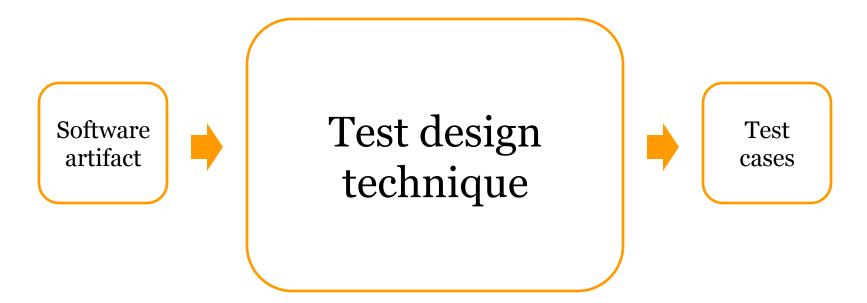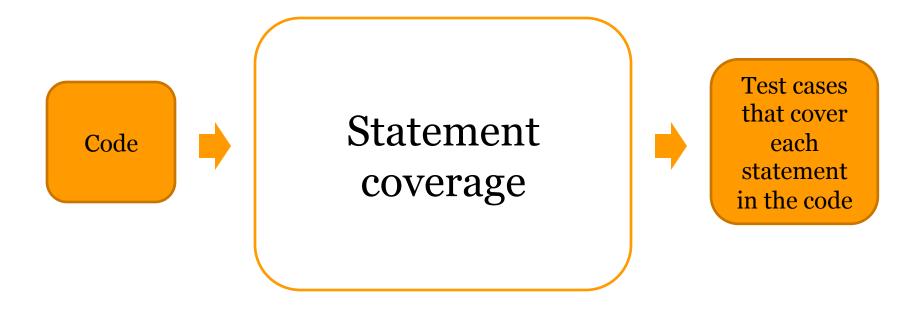
- Can be seen as functions that, based on a set of rules, generate test cases from software artifacts (e.g., specifications or code)

Test Design Techniques

Code → Statement coverage → Test cases that cover each statement in the code

- Example: Statement Coverage

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Test requirement/coverage item

Test Design Techniques

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- Example: Statement Coverage

Test Design Techniques

...can be classified based on several different aspects

- Type of abstraction
  - Graph-based, logic-based, syntax-based, etc.
- Software engineering artifact
  - Specification-based versus implementation-based
- Level of knowledge of the inner workings of the software
  - Black-box, Gray-box, or White-box

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However, we will start from the perspective of software behaviour