**Assignment No. 2**

1. **Provide a brief definition of specification-based testing. Explain why specification-based testing is essential in the software testing process.**
2. **Discuss different types of specifications used in software development (e.g., functional specifications, design specifications, requirements specifications). Explain how each type of specification contributes to the testing process.**
3. **Identify and discuss the benefits of using specification-based testing. Highlight the potential challenges or limitations associated with specification-based testing.**
4. **Describe at least three specification-based testing techniques (e.g., equivalence partitioning, boundary value analysis, decision tables). Provide a brief explanation of each technique and its application.**
5. **Scenario: Consider a simple online banking application. The application allows users to log in, view account balances, transfer funds, and update personal information.**

**Specification Review**

* Provide a sample functional specification for the login functionality of the online banking application.
* Identify key components such as input fields, buttons, and expected behavior.

**Equivalence Partitioning**

* Apply the equivalence partitioning technique to the login functionality.
* Identify and list equivalence classes for different input parameters.
* Design test cases based on the identified equivalence classes.

**Boundary Value Analysis**

* Perform boundary value analysis for the login functionality.
* Identify boundary values for input parameters.
* Design test cases focusing on boundary values.

**Decision Tables**

* Create a decision table to represent the scenarios for transferring funds in the online banking application.
* Define relevant conditions and corresponding actions.
* Generate test cases based on the decision table.

**Submission Guidelines**

1. Submit a well-organized document containing theoretical explanations, answers to each question, and any supporting diagrams or tables.
2. Include clear references to any external sources used in your research.
3. Submit your assignment by 21st December 2023.