Problem 5: Source Code Review

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1 Source code review of Function F5: ab^x

1.1 Introduction

The function provided for the source code review purpose was ab^x is a power function. The code was reviewed based on the coding standards that the developer has followed while writing the code. For this, I reviewed coding practices, non-functional requirements and overall structure of the code.

1.2 Code Review Checklist

Following are the checklists of the standard code review guidelines which was used for reviewing the source code:

- 1. Don't repeat yourself (Avoid duplication)
- 2. Functionality of the code should work properly
- 3. Use of meaningful class, method and variables names
- 4. Don't ignore the exception in the code
- 5. Avoid creating unnecessary class, methods, variables and objects.
- 6. Proper comments have been added
- 7. Unnecessary packages should not be imported
- 8. Class, function should not be too lengthy
- 9. Code must have unit test cases
- 10. Proper error message should be displayed

1.3 Review Approach

Several steps were followed while reviewing the source code.

- First, the code was reviewed well enough to check the naming convention, proper comments in the class and methods, and test cases.
- Second, the code was run to check whether the functionality properly works or not.
- Third, test cases were run to check whether all the test cases pass or not.

1.4 Code Review Results

Checklist	Description	Result
1	Duplicate Code	PASS
2	Functionality of the code	PASS
3	Naming Convention	PASS
4	Exception Handling	PASS
5	No unnecessary class, methods and variables	PASS
6	Useful comments	PASS
7	No unnecessary imports	PASS
8	No lengthy code	PASS
9	Must have unit test cases	PASS
10	Proper error message	PASS

1.5 Conclusion

From the above, it is noted that the code is well written and all the necessary quality attributes are fulfilled. The only flaw I could found was missing few comments in the function body.