1. Write a unittest test case to verify the behavior of a class that implements basic bank account operations (deposit, withdraw, check balance).

2. How can you test private methods or variables in Python using unittest?

3.  What is the role of setUpClass() and tearDownClass() in unittest? Provide a code snippet where these are useful.

4.  How do you test a function that raises different exceptions based on input (e.g., ValueError for negatives, TypeError for strings)?

5.  Write a unittest case to validate a function that returns the factorial of a number. Test valid inputs, 0, and invalid types.

6. How would you use unittest.skip, skipIf, or skipUnless in practical test cases?

1.  Write a pytest test using @pytest.mark.parametrize for a function that checks if a number is even.

2.  How can you use a fixture in pytest to provide test data to multiple test functions?

3.  Use pytest.raises to test a function that throws a ValueError when a string input is passed to a numeric-only function.

4.  Demonstrate how pytest.mark.skipif can be used to conditionally skip a test if the Python version is < 3.9.

5.  Create a test using pytest where the test fails and is marked as expected to fail using @pytest.mark.xfail.

6. How do you use tmp\_path or tmpdir fixture in pytest to test functions that create or write to files?