Automated testing
In python

Automation Testing

- Automation testing is the process of using specialized tools and scripts to execute tests automatically.

- It eliminates the need for manual intervention, making the testing process faster, more efficient, and more reliable.

Levels of Testing

Unit Testing:
- Testing individual components (functions, methods) of the code in isolation.

Integration Testing:
- Testing how different modules or components work together.

System Testing:
- Testing the entire application as a whole.

Acceptance Testing:
- Verifying if the system meets business requirements.

Python Testing Frameworks

unittest:
- Built-in testing library in Python.

pytest:
- A popular and powerful testing library.

nose2:
- Extension of unittest.

doctest:
- Tests written in docstrings.

Test-Driven Development - TDD

- Test-Driven Development (TDD) is a software development methodology where you write tests before writing the actual code.

- The process ensures that your code meets the specified requirements and is continuously tested during development.