

## Apache JMeter Introduction

Today I learned about Apache JMeter. It is a tool used to test how websites and APIs handle lots of users at the same time.

### What JMeter Does:

- Checks speed and performance of websites or servers.
- Simulates many users visiting a website at once.
- Shows response time, errors, and how much the server can handle.

### Main Parts of JMeter:

- Test Plan → The main container for your test.
- Thread Group → Represents users; you can set number of users and how fast they come.
- Sampler → Tells JMeter what request to send (like HTTP request).
- Listener → Shows results as a table or graph.
- Timer → Adds delays to simulate real user actions.
- Assertion → Checks if responses are correct.

### How to Do a Simple Test

1. Open JMeter.
2. Add a Thread Group (set users, ramp-up, loop).
3. Add a Sampler (like HTTP Request to a website).
4. Add a Listener (View Results Tree or Summary Report).
5. Click Start and watch results.

Today I learned the basics of Apache JMeter. It helps us test websites and APIs to see how they perform when many users visit at the same time.