# Performance testing assignment:

You have been assigned to perform performance testing on the Demo Blaze Product Store website **(https://www.demoblaze.com/)** using JMeter. Your task involves executing two types of performance tests - **Benchmark** and **RampUp**, each with different durations and number of users.

For the Benchmark test, you will be testing the purchase flow and pagination flow scenarios of the application with a single user for 1 hour. Benchmark test should be executed twice since you will need to compare 1st Benchmark vs 2nd Benchmark. For the RampUp test, you will be testing the same scenarios with a maximum of 10 users for 4 hours. Compare RampUp vs 2nd Benchmark results. The user distribution for these scenarios should be **70% for the purchase flow and 30% for the pagination flow.**

**Application**: Demo Blaze Product Store - https://www.demoblaze.com/
**Performance tests to execute**: (2x) Benchmark and RampUp
**Duration and number of users**: Benchmark 1h (1 user) , RampUp 4h (10 users max)
**Scenarios**: Purchase flow, Pagination flow (user distribution is 70% - 30%)
**Challenges**: Find a way to handle login sessions.

**Purchase flow:**

1. Login to the application
2. Open first item (Samsung galaxy s6)
3. Add item to the Cart
4. Navigate to the Cart
5. Validate that phone is added to Cart
6. Click on Place Order
7. Populate the Place order form
8. Click Purchase button
9. Logout
10. Validate that user is logged out

**Pagination flow:**

1. Login to application
2. Navigate to Laptops categories
3. Validate that Laptop category is opened
4. Navigate to Next page (Pagination) by clicking Next
5. Validate that next page is opened
6. Logout
7. Validate that user is logged out

Create Performance tests for two scenarios above. Note that the performance tests should be on the API level and should not measure web resource load time, such as pictures, videos, or text files. You can use any available JMeter plugin for this task. There is no limit on the number of assertions that you can include in your performance tests. You are free to add as many assertions as you think are necessary to validate the expected responses of the application under different scenarios. As the final step, you are required to prepare a detailed performance testing report that **compares the load times** of the 1st Benchmark and 2nd Benchmark, as well as the RampUp test and the 2nd Benchmark. The report should provide a comprehensive analysis of the test results, including any issues and bottlenecks encountered during the testing process.