

TESTING NODE APIS WITH

MOCHA & JMETER

API TEST WITH MOCHA

- ▶ Assuming you have installed node v14
- ▶ \$ npx mocha app.test.js # or \$ npx mocha ./**/*.test.js

```
const assert = require('assert');

describe('#indexOf()', () => {
  it('should return -1 when the value is not present', () => {
    assert.equal([1, 2, 3].indexOf(5), -1)
  });
});
```

TEST OUTPUT

```
(base) ~/sjsu/273/mocha:$ npx mocha app.test.js  
npx: installed 92 in 4.006s
```

Array

#indexOf()

✓ should return -1 when the value is not present

GET users API call

✓ should return correct page number (using async) (116ms)

✓ should return correct page number (using done) (82ms)

Mocha hooks

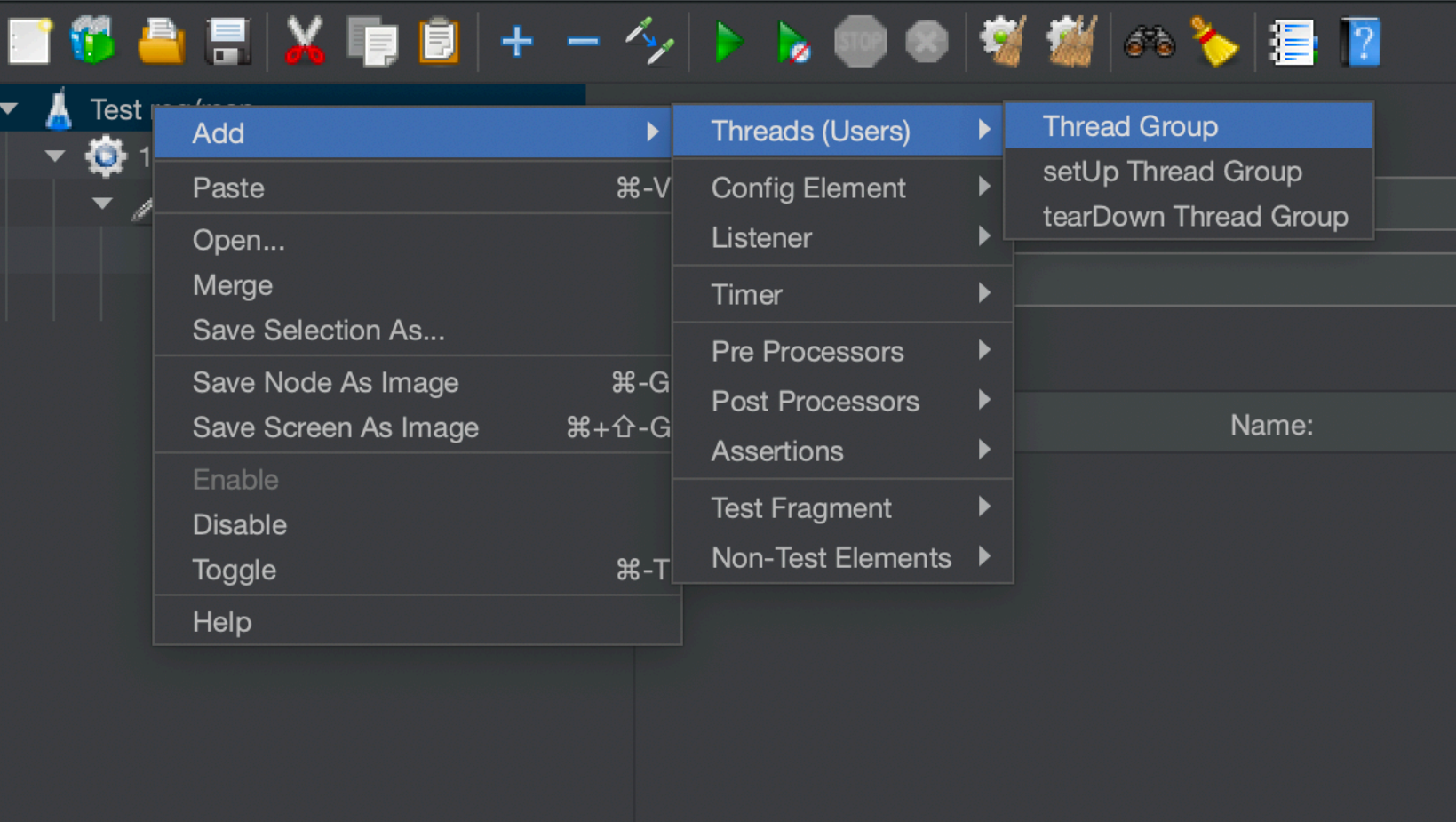
✓ should set value of count to 1 before running this test

4 passing (1s)

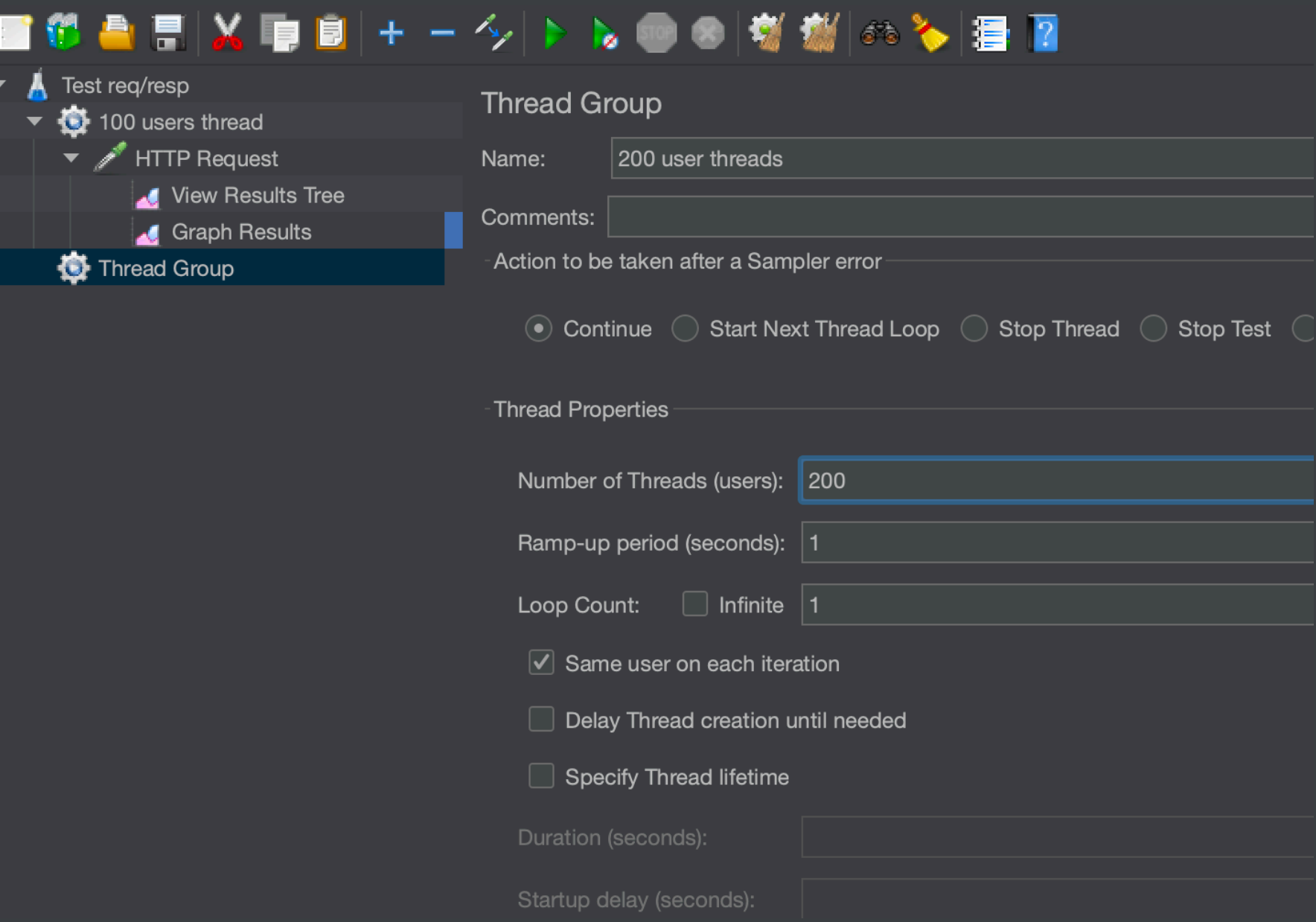
LOAD TESTING WITH JMETER

- ▶ Install Apache JMeter
- ▶ Add "Thread Group" component to your Test Plan
- ▶ Add a "HTTP Request" component to the "Thread Group"
- ▶ Add "View Results Tree" and "Aggregate Report" listener type components to the "Thread Group"
- ▶ Fill "HTTP Request" fields.

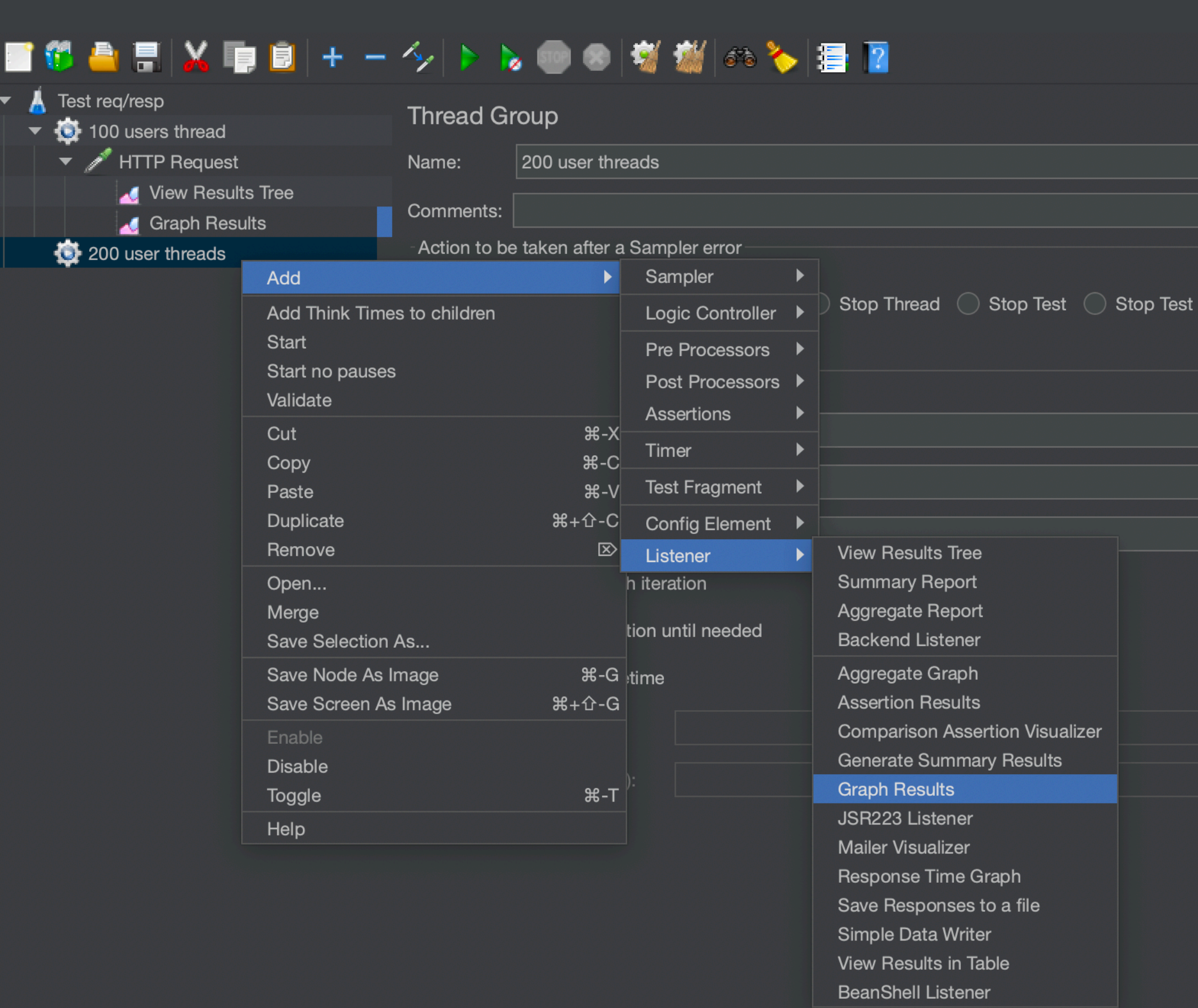
Step 1 - Add a thread group



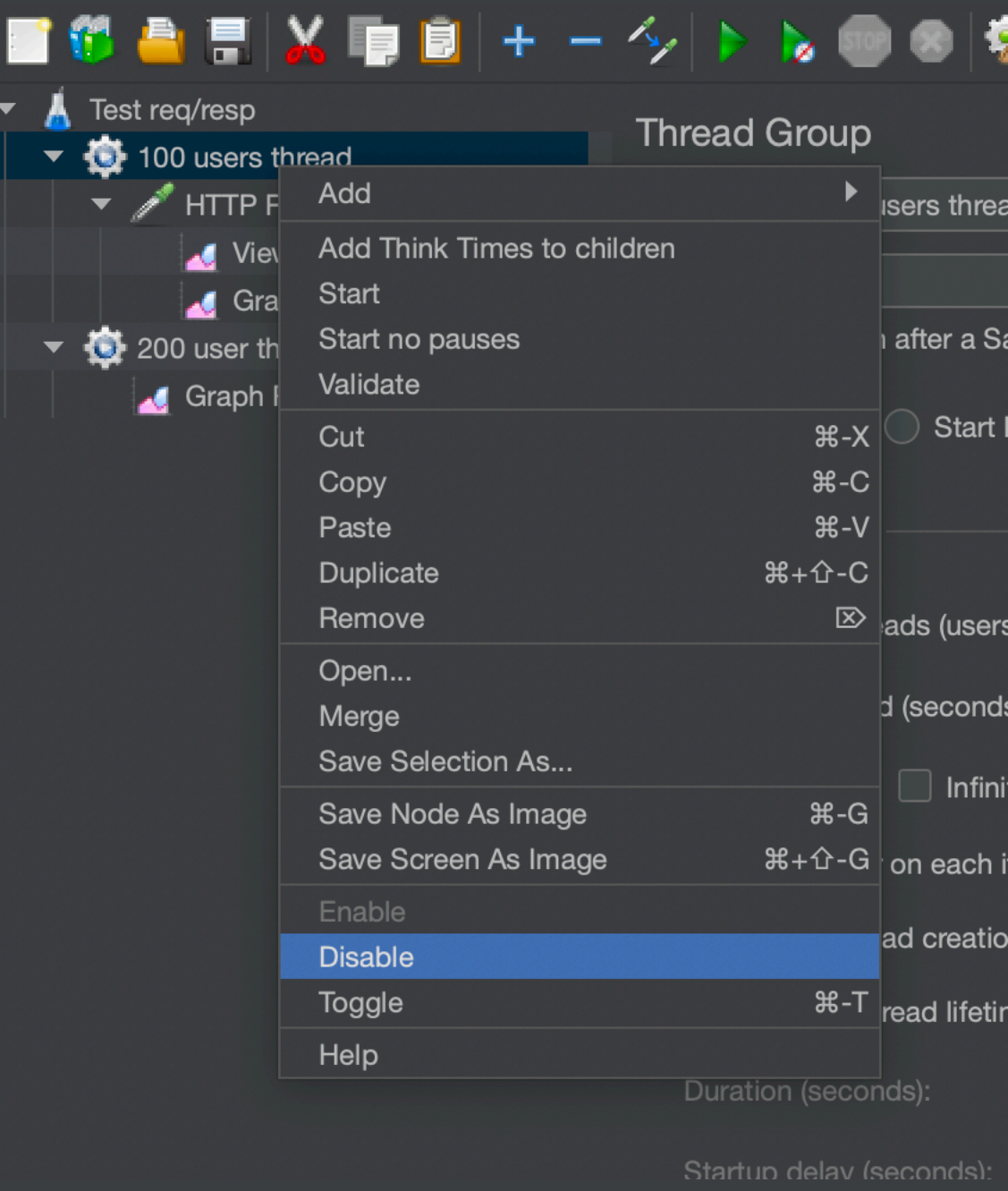
Step 2 - Set number of threads



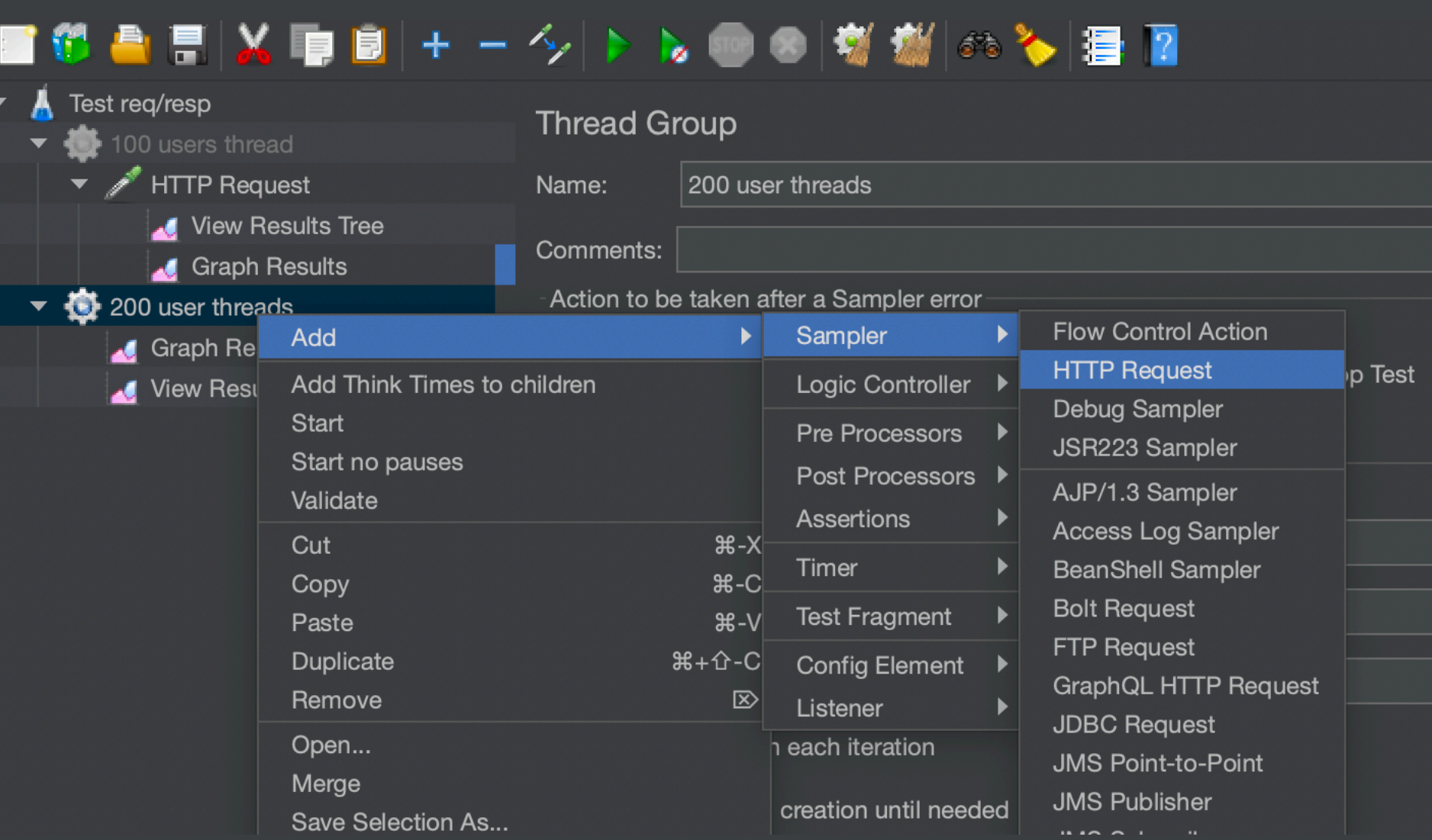
Step 3 - Add listener to generate graph



Step 4 - Disable any other test groups if present



Step 5 - Add http request to test



Step 7 - Run and view results

▼ 🔬 Test req/resp

▼ ⚙️ 100 users thread

▼ 📝 HTTP Request

📊 View Results Tree

📊 Graph Results

▼ ⚙️ 200 user threads

📊 Graph Results

📊 View Results Tree

📝 HTTP Request

Graph Results

Name:

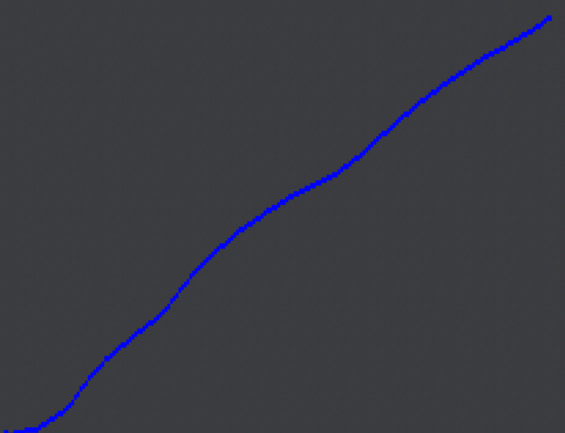
Comments:

Write results to file / Read from file

Filename Log/Display Only: ☐ Errors ☐ Successes ☐

Graphs to Display ☐ Data ☒ Average ☐ Median ☐ Deviation ☒ Throughput

3083 ms



0 ms

No of Samples 200

Deviation 550

Latest Sample 3457

Throughput 2,752.925/minute

Average 2460

Median 2408