



# Execute Performance Tests using K6

# Install Pre-req and K6

- Open Google Cloud Shell and enter the below commands

```
mkdir myapp
```

```
cd myapp
```

```
sudo apt-get update
```

```
sudo apt-get install nodejs npm
```

- Goto the Editor Tab and click on **Open Home Workspace**

- Right click on the myapp directory and create a new file "app.js" and paste the below code

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

```
const app = express();
```

```
const port = 3010;
```

```
app.get('/', (req, res) => {
```

```
  res.send('Hello, World!');
```

```
});
```

```
app.listen(port, () => {
```

```
  console.log(`Server running at http://localhost:${port}/`);
```

```
});
```

# Install Pre-req and K6

- Switch back to console window and execute the below commands

`npm install express`

`node app.js`

- Click on the icon **Web Preview** and "**Change Port view**". Enter the port as "**3010**" and click on "**Click and Preview**"
- You should be able to see app running running on the port 3010

# Install Pre-req and K6

- Switch back to console window and click on + icon to open another tab of console window

```
npm install express
```

```
node app.js
```

- In the console window , execute the below commands

```
sudo gpg -k
```

```
sudo gpg --no-default-keyring --keyring /usr/share/keyrings/k6-archive-keyring.gpg --keyserver  
hkp://keyserver.ubuntu.com:80 --recv-keys C5AD17C747E3415A3642D57D77C6C491D6AC1D69
```

```
echo "deb [signed-by=/usr/share/keyrings/k6-archive-keyring.gpg] https://dl.k6.io/deb stable main" |  
sudo tee /etc/apt/sources.list.d/k6.list
```

```
sudo apt-get update
```

```
sudo apt-get install k6
```

- K6 package should get successfully installed and you should be able to view the version

# Install Pre-req and K6

- Switch back to Editor window , right click on the directory “**myapp**” and create the file “load-test.js” and add the below content in the file

```
import http from 'k6/http';
import { check } from 'k6';

export default function () {
  const response = http.get('http://localhost:3010/');

  check(response, {
    'status is 200': (r) => r.status === 200,
    'body contains "Hello, World!"': (r) => r.body.includes('Hello, World!'),
  });
}
```

## Install Pre-req and K6

- Switch back to “Console Window” and run the below command.

```
k6 run --vus 10 --duration 1m script.js
```

- The load test will run with 10vUsers for 1 min