# Node.js Assessment

**How to Run the Project**

**1. Clone or Extract the Project**

- If the project is in a zip file, extract it.
- Otherwise, clone the repository or copy the folder to your local system.

**2. Run the Node.js HTTP Server**

**Steps:**

1. Open a terminal and navigate to the project directory:

```
cd nodejs-assessment
```

2. Start the server:

```
node server.js
```

3. Open your browser and go to:

http://localhost:3000

4. You should see the following JSON response:

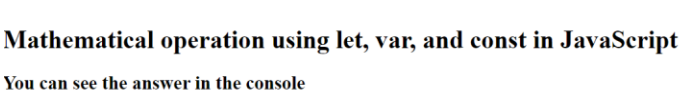

**3. Run JavaScript Mathematical Operations**

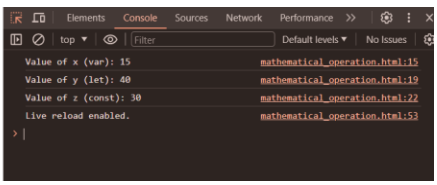
**Steps:**

1. Run the math_operations.js script and also run the **mathematical_operation.html**

```
node math_operations.js
```

2. The output will display the results of operations using let, var, and const.



```
C:\Users\harsh\nodejs-assessment>node math_operations.js
Value of x (var): 15
Value of y (let): 40
Value of z (const): 30

C:\Users\harsh\nodejs-assessment>
```

**4. Run Custom Array Method Implementations**

**Steps:**

1. Run the array_methods.js script and also run in the **array_methods.html**

node array_methods.js

2. The script tests custom implementations of map, reduce, filter, and flatMap

**Implement map, reduce, filter, and flatMap using JavaScript.**

You can see the answer in the console


```
C:\Users\harsh\nodejs-assessment>node array_methods.js
myMap: [ 2, 4, 6, 8, 10 ]
myReduce: 15
myFilter: [ 3, 4, 5 ]
myFlatMap: [ 2, 4, 6, 8, 10 ]

C:\Users\harsh\nodejs-assessment>
```

**Commands Summary**

| Task | Command |
|---|---|
| **Start HTTP Server** | Node server.js |
| **Run Mathematical Operations** | Node math_operations.js |

| Task | Command |
| --- | --- |
| **Test Custom Array Methods** | node array_methods.js |

# THANK YOU