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Enroll no: 21162101019
Sem: 5 Batch: 51 Branch: CBA

Sub: Microservices

Practical 5

AIM: **www.abc.com** website owner wants to manage user's records in JSON files. Save visitor details like name, password, id, occupation, etc.
Admin wants to perform the following task on that file:

1. list out all users.
2. Add a new user with said detail
3. Create Rest API to work with JSON

covering the following endpoints:

/user/add- to add a new user(Check if any data is missing in the request or the user that you are trying to add already exists).

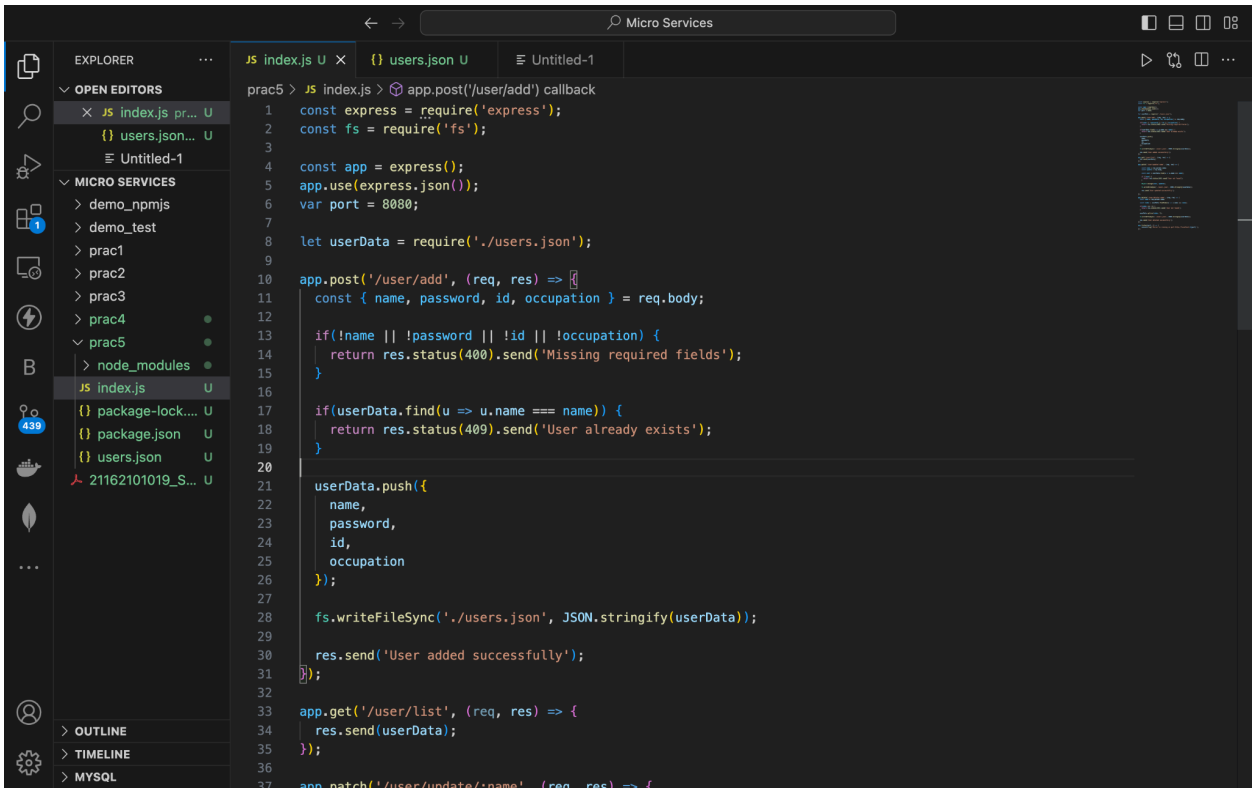
/user/list- To get the list of all the existing users in the file

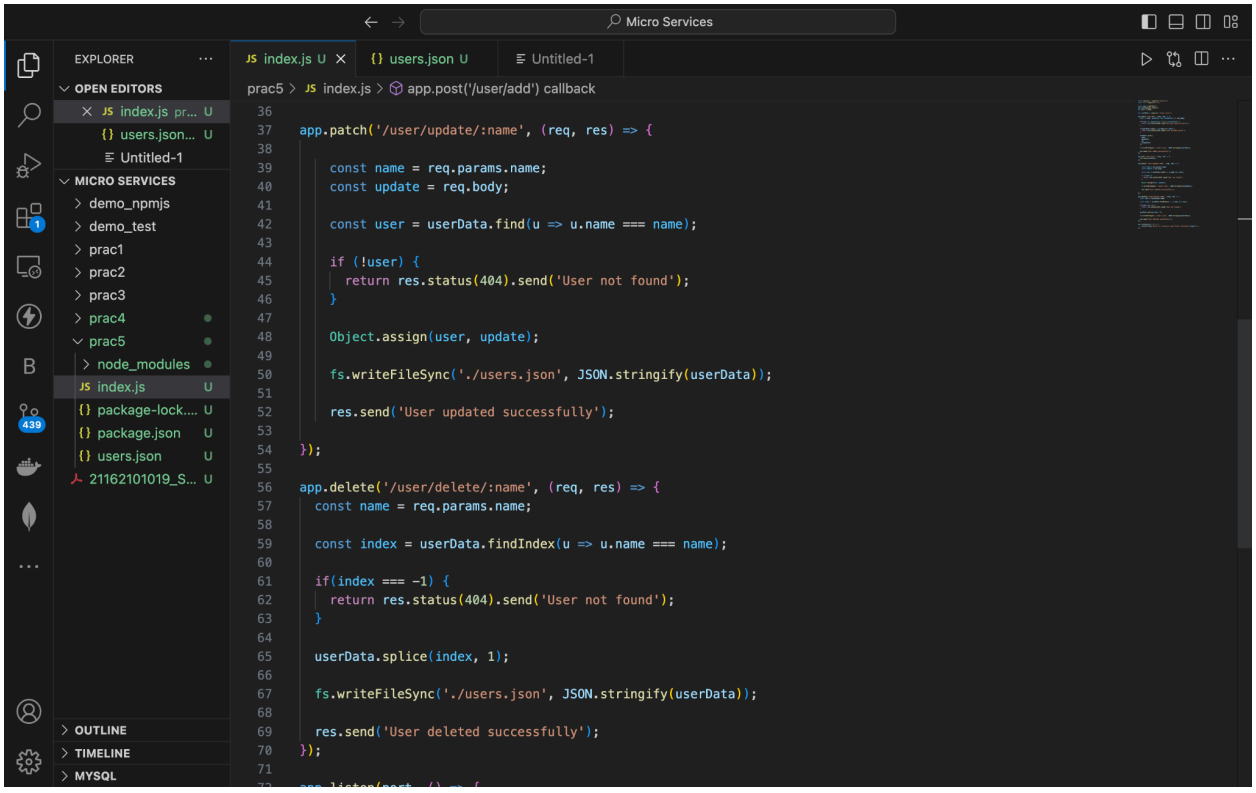
/user/update/:username- To update the user's data
by finding the user using the name and do it through the patch method. (Check if the user exists or not).

/user/delete/:username- delete the user with
the help of username(Check if the user exists or not).

GITHUB LINK:
https://github.com/Shivam3783/microservice_practicals/tree/main/prac5

CODE: 1)


Micro Services
EXPLORER
OPEN EDITORS
index.js pr... U
users.json... U
Untitled-1
MICRO SERVICES
demo_npmjs
demo_test
prac1
prac2
prac3
prac4
prac5
node_modules
index.js U
package-lock.... U
package.json U
users.json U
21162101019_S... U
OUTLINE
TIMELINE
MYSQL
index.js U
users.json U
Untitled-1
prac5 > index.js > app.post('/user/add') callback
const express = require('express');
const fs = require('fs');
const app = express();
app.use(express.json());
var port = 8080;
let userData = require('./users.json');
app.post('/user/add', (req, res) => {
const { name, password, id, occupation } = req.body;
if(!name || !password || !id || !occupation) {
return res.status(400).send('Missing required fields');
}
if(userData.find(u => u.name === name)) {
return res.status(409).send('User already exists');
}
userData.push({
name,
password,
id,
occupation
});
fs.writeFileSync('./users.json', JSON.stringify(userData));
res.send('User added successfully');
});
app.get('/user/list', (req, res) => {
res.send(userData);
});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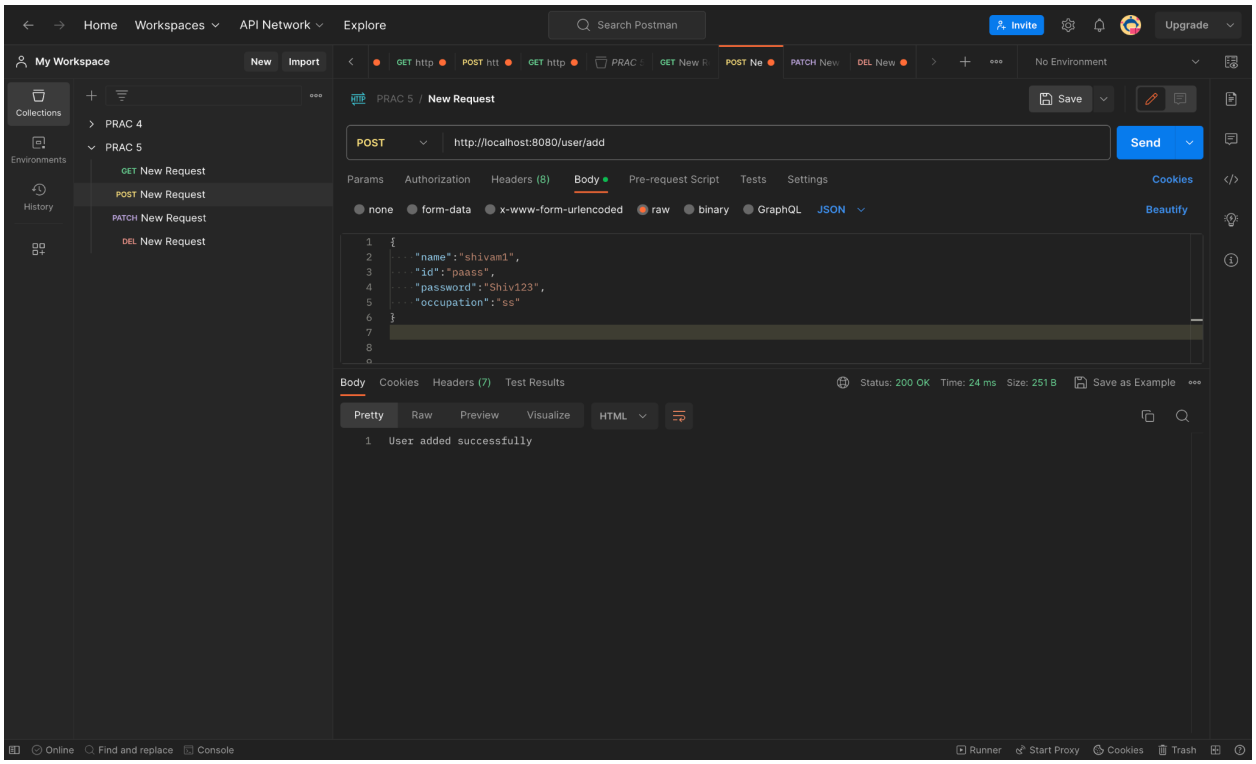
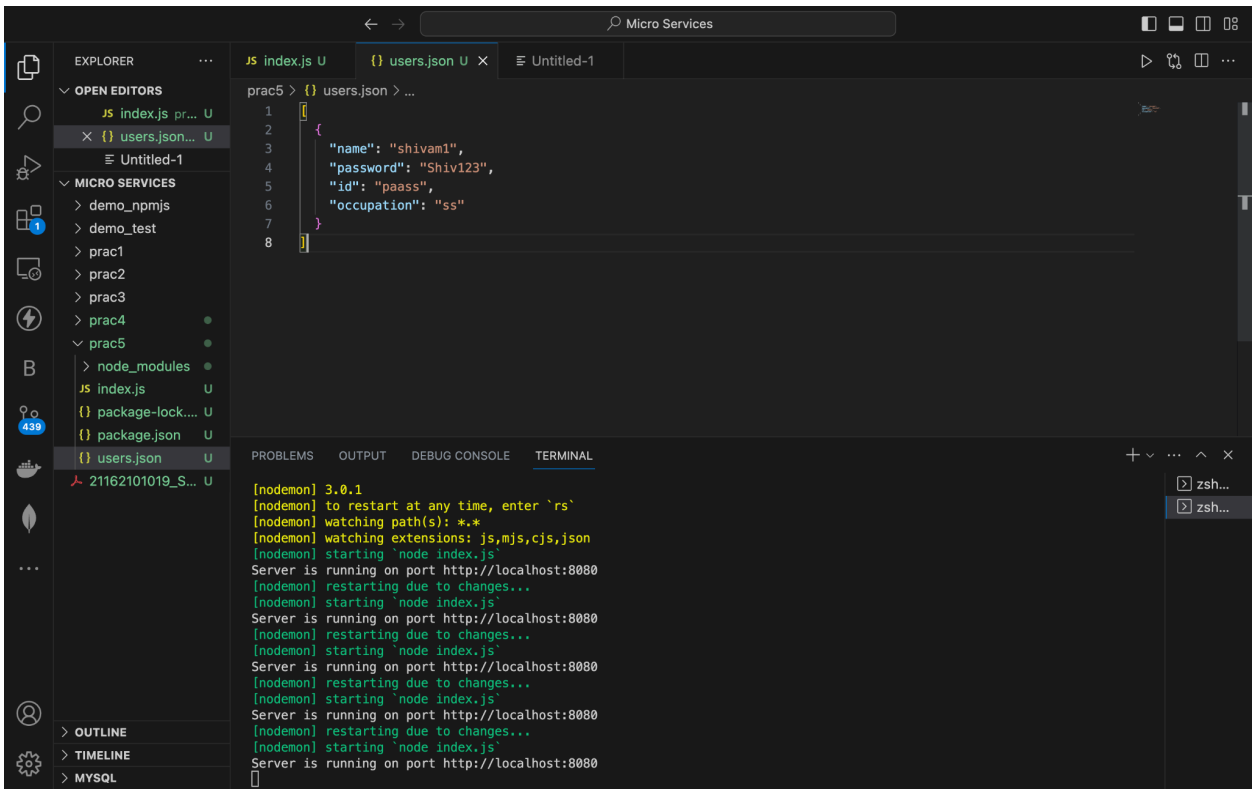
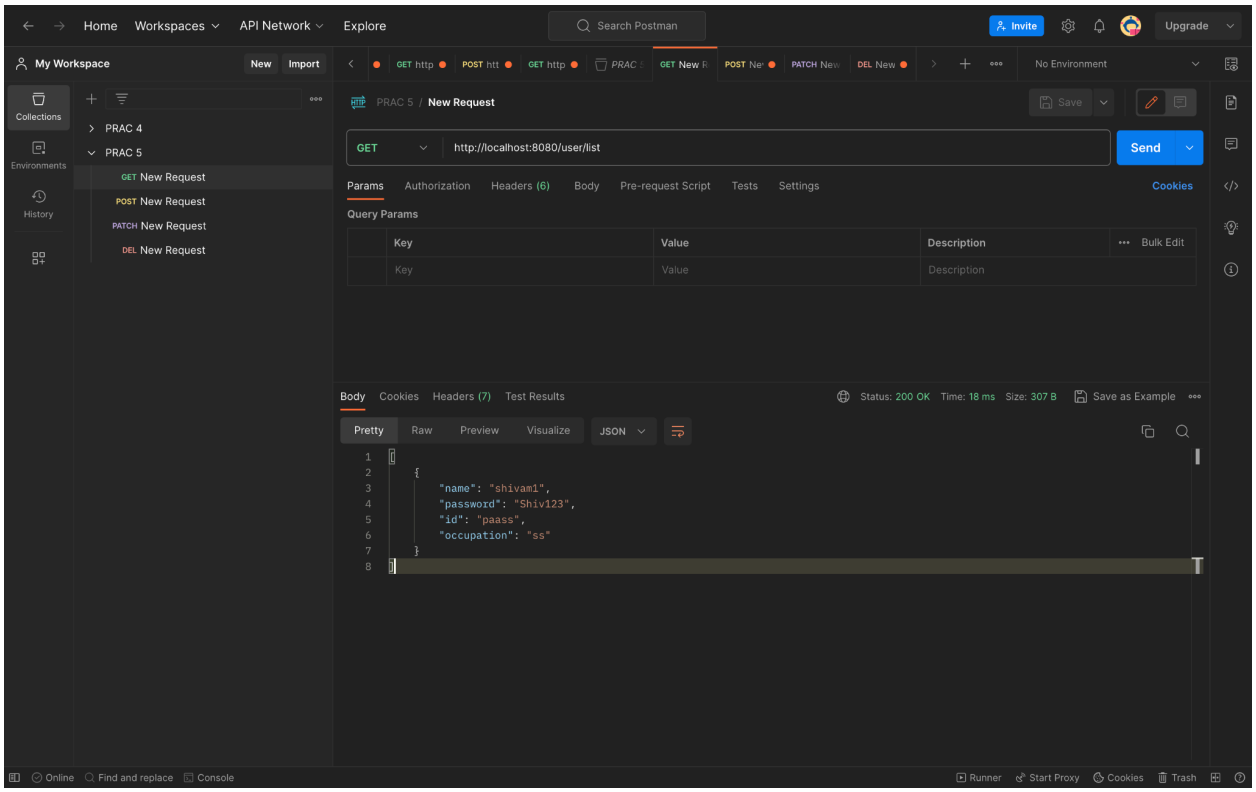
users.json U
Untitled-1
prac5 > index.js > app.post('/user/add') callback
app.patch('/user/update/:name', (req, res) => {
const name = req.params.name;
const update = req.body;
const user = userData.find(u => u.name === name);
if (!user) {
return res.status(404).send('User not found');
}
Object.assign(user, update);
fs.writeFileSync('./users.json', JSON.stringify(userData));
res.send('User updated successfully');
});
app.delete('/user/delete/:name', (req, res) => {
const name = req.params.name;
const index = userData.findIndex(u => u.name === name);
if(index === -1) {
return res.status(404).send('User not found');
}
userData.splice(index, 1);
fs.writeFileSync('./users.json', JSON.stringify(userData));
res.send('User deleted successfully');
});

OUTPUT in POSTMAN: → Add data (POST REQUEST)

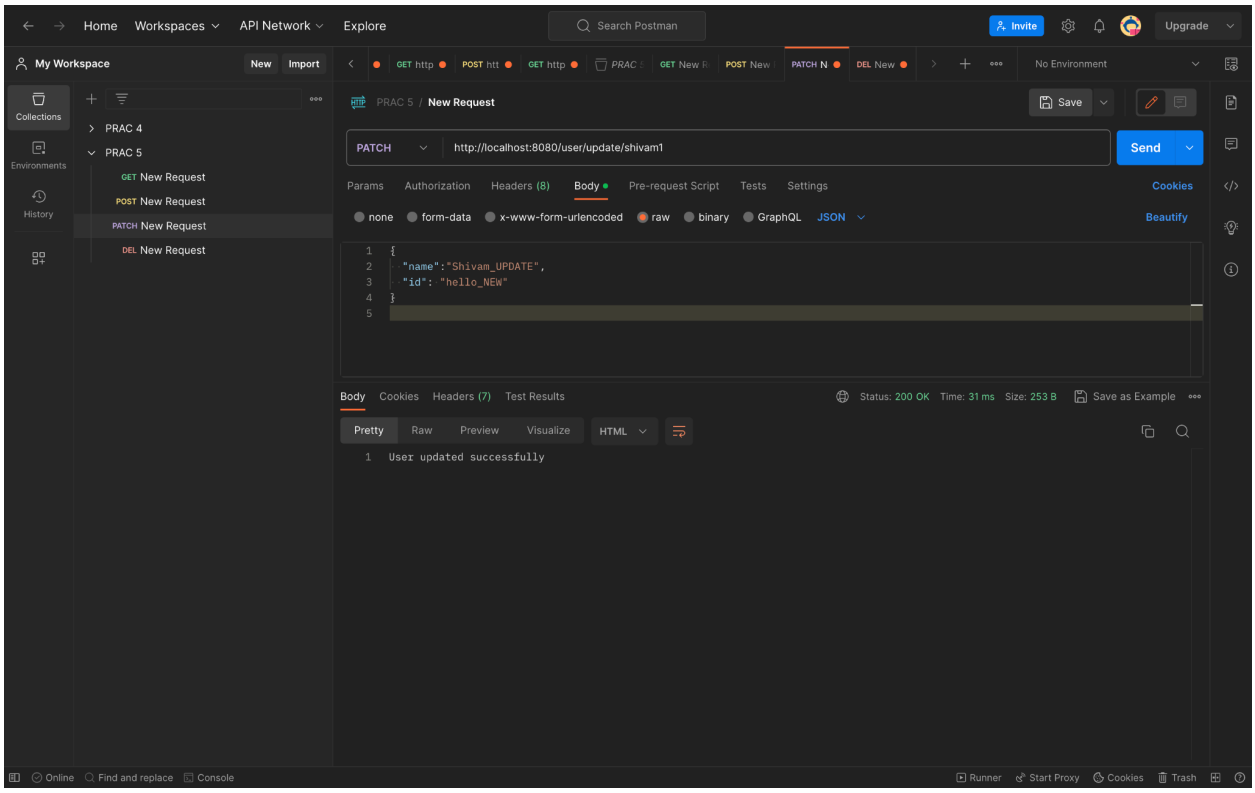


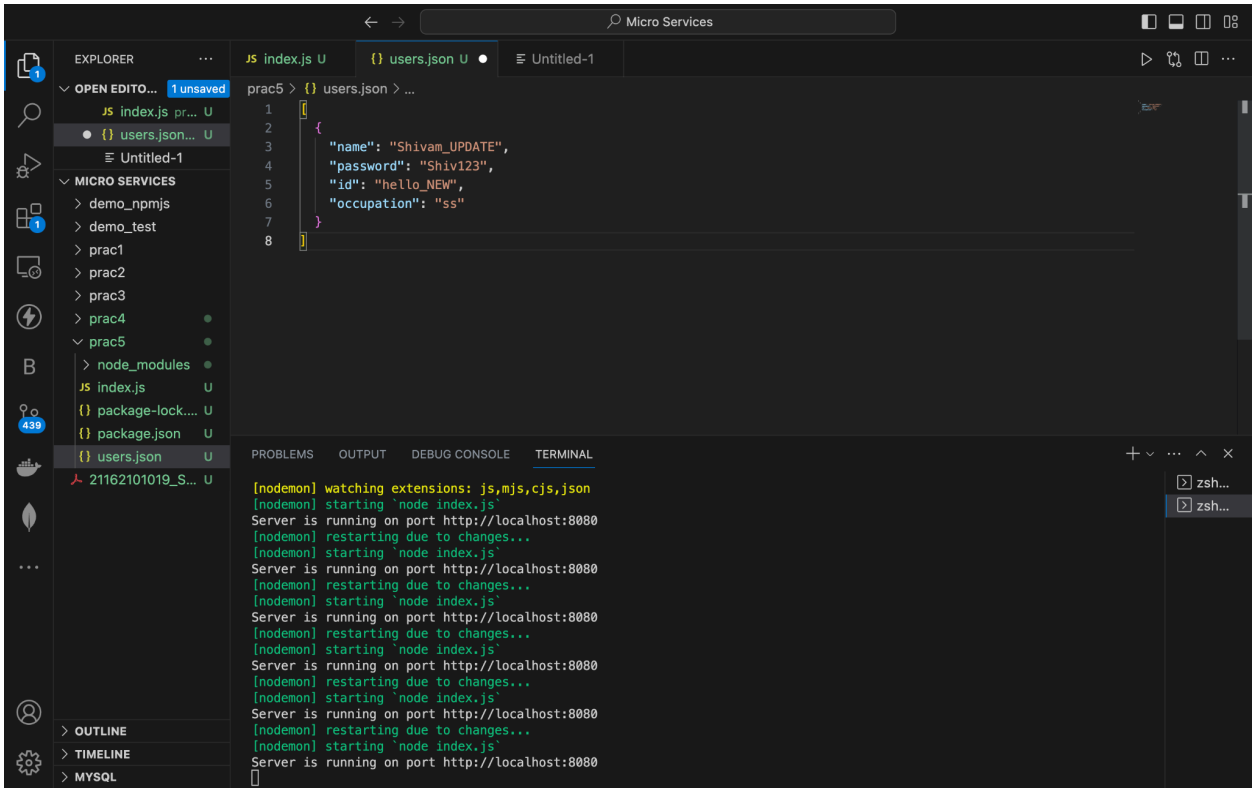


→ GET data (GET REQUEST)



→ Update data (PATCH REQUEST)

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index.js pr... U
users.json... U
Untitled-1
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prac1
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package.json U
users.json U
21162101019_S... U
OUTLINE
TIMELINE
MYSQL
index.js U
users.json U
Untitled-1
prac5 > users.json > ...
{
"name": "Shivam_UPDATE",
"password": "Shiv123",
"id": "hello_NEW",
"occupation": "ss"
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
zsh...
zsh...
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node index.js`
Server is running on port http://localhost:8080
[nodemon] restarting due to changes...
[nodemon] starting `node index.js`
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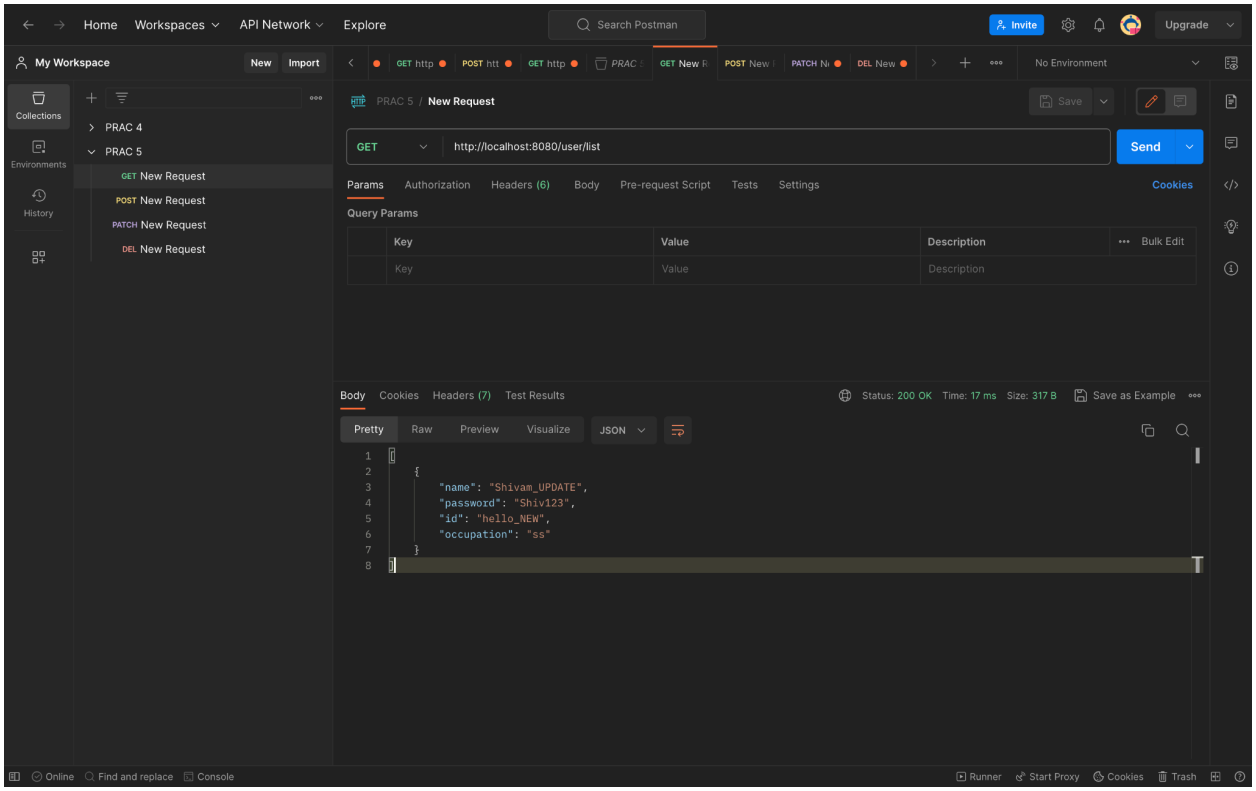
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Workspaces
API Network
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Search Postman
Invite
Upgrade
My Workspace
New
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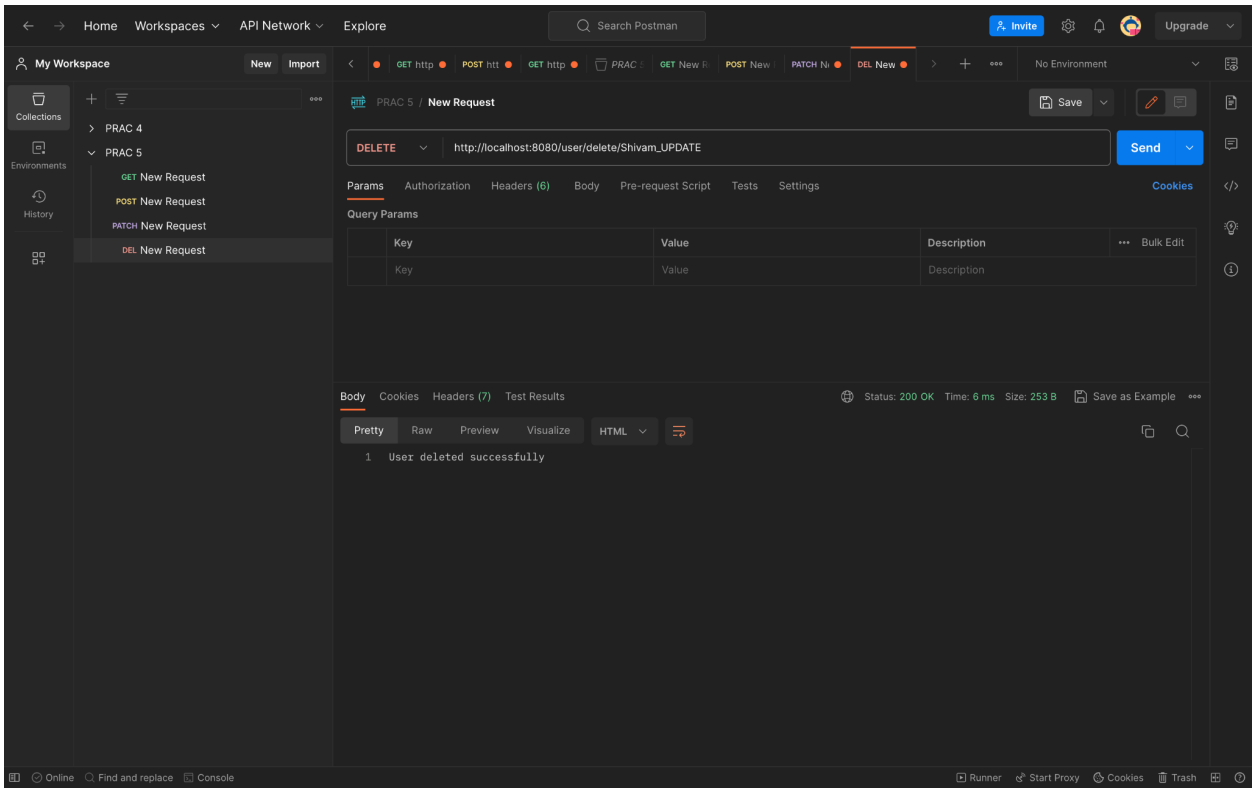
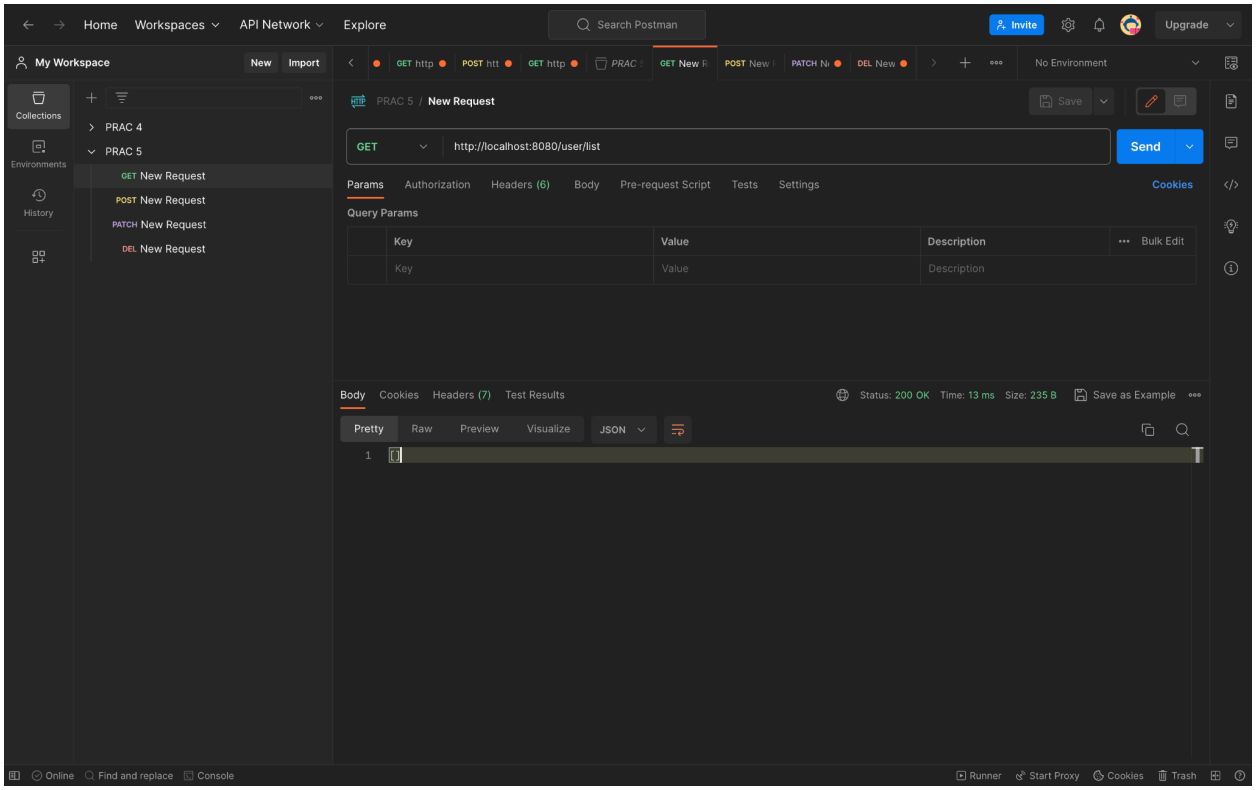
Environments
History
PRAC 4
PRAC 5
GET New Request
POST New Request
PATCH New Request
DEL New Request
No Environment
PRAC 5 / New Request
Save
GET
http://localhost:8080/user/list
Send
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Cookies
Query Params
Key
Value
Description
Bulk Edit
Body
Cookies
Headers (7)
Test Results
Status: 200 OK
Time: 17 ms
Size: 317 B
Save as Example
Pretty
Raw
Preview
Visualize
JSON
{
"name": "Shivam_UPDATE",
"password": "Shiv123",
"id": "hello_NEW",
"occupation": "ss"
}
Online
Find and replace
Console
Runner
Start Proxy
Cookies
Trash

→ Delete data (DELETE REQUEST)

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Tests
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Cookies
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Key
Value
Description
Bulk Edit
Body
Cookies
Headers (7)
Test Results
Status: 200 OK
Time: 13 ms
Size: 235 B
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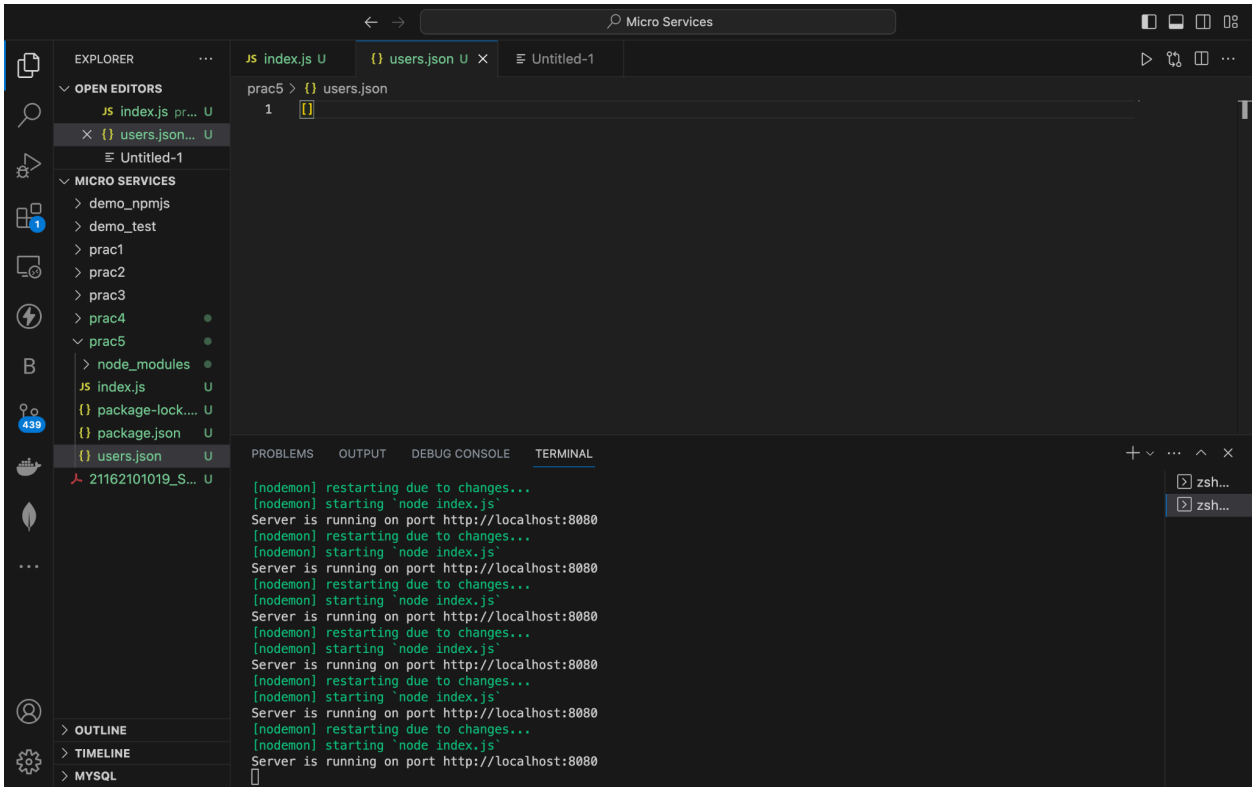
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