Lahore Garrison University

DHA Phase 6 Lahore
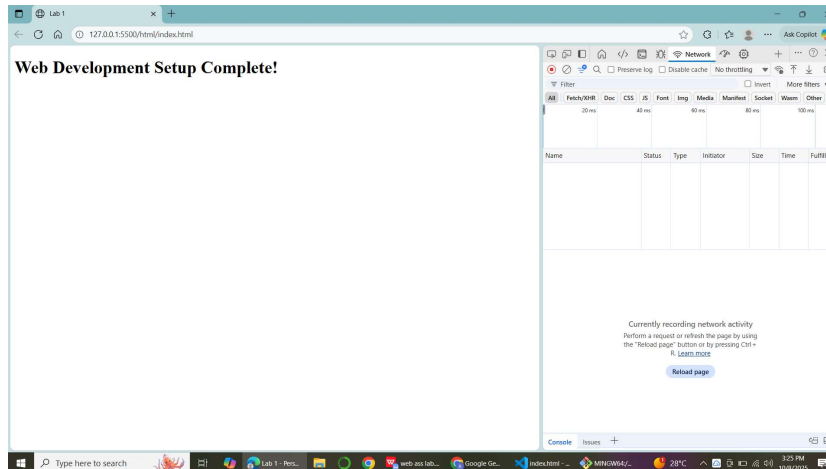

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Section	D
Subject	Web Technologies
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Lab 2

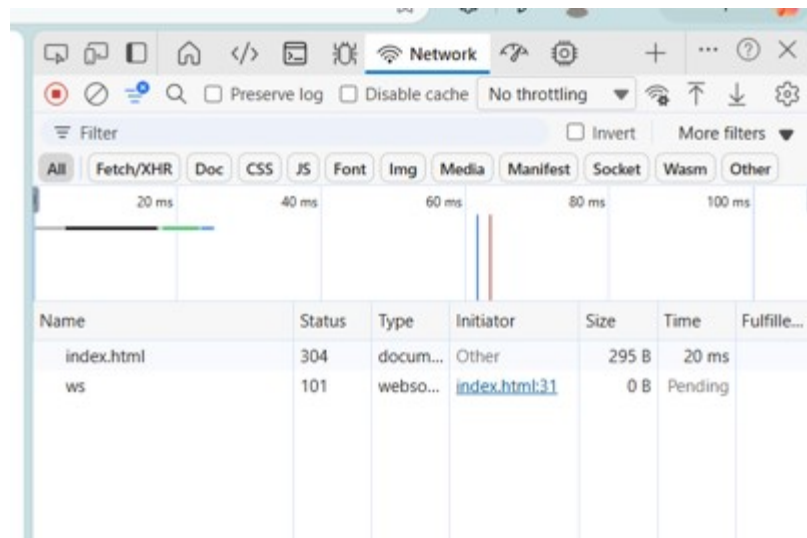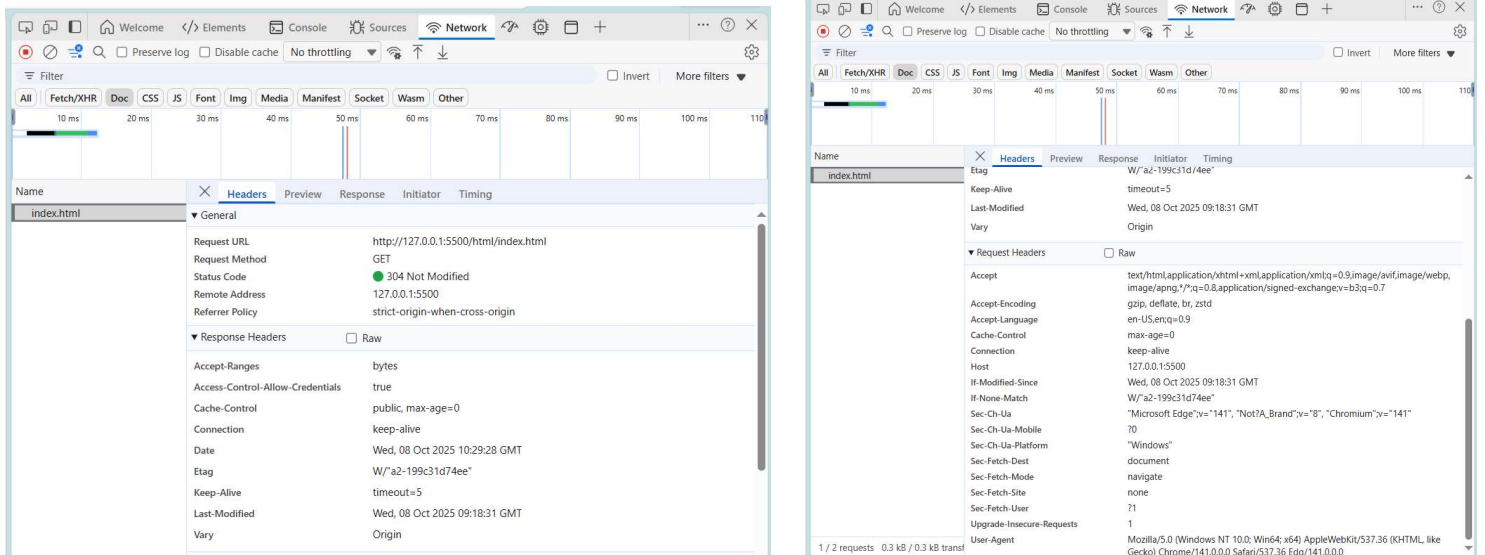## Step 1: Inspect HTTP Requests with DevTools

1. Open any simple HTML page (e.g., `index.html`) using **Live Server**.

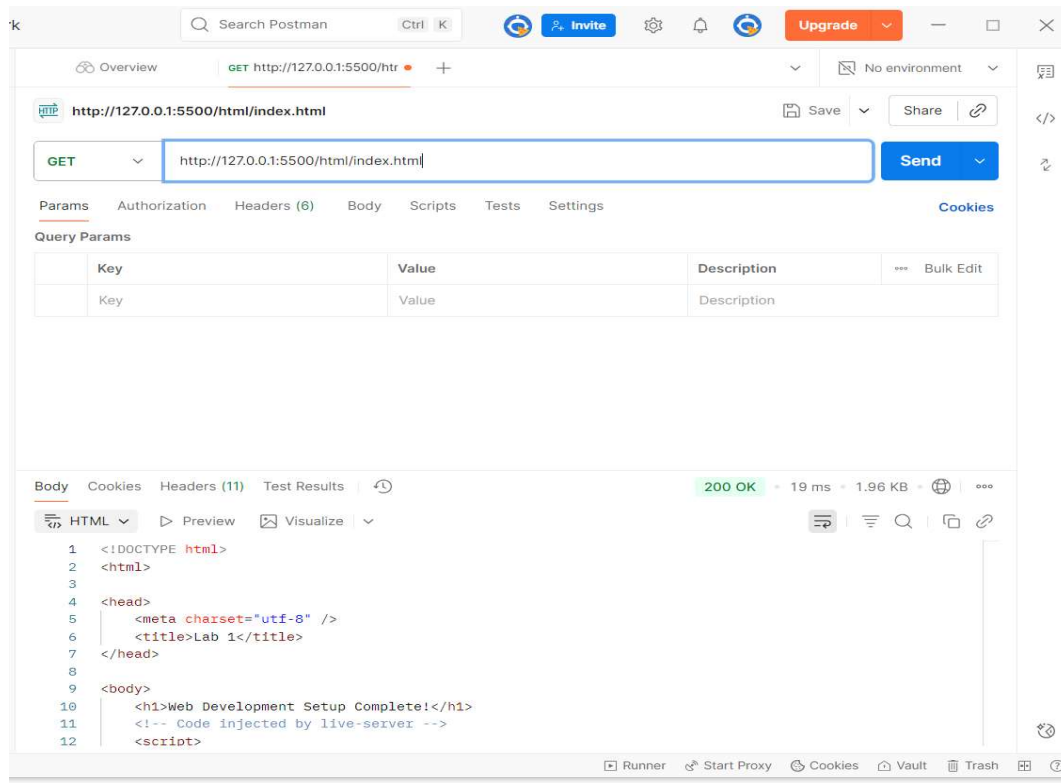2. Right-click → **Inspect** → go to **Network** tab.

3. Click on the main request (e.g., `index.html`) and observe:

Step 2: Make GET/POST Requests with Postman or curl

Using Postman

1. Open Postman and create a **GET** request to your local server (e.g., `http://localhost:5500/index.html`).

2. Observe the **status code**, **response body**, and **headers**.

Key	Value
Vary	Origin
Access-Control-Allow-Credentials	true
Accept-Ranges	bytes
Cache-Control	public, max-age=0
Last-Modified	Wed, 08 Oct 2025 18:51:13 GMT
ETag	W/"188-199c529c81a"
Content-Type	text/html; charset=UTF-8
Content-Length	1885

3. Create a **POST** request to a test endpoint (e.g., `https://httpbin.org/post`).
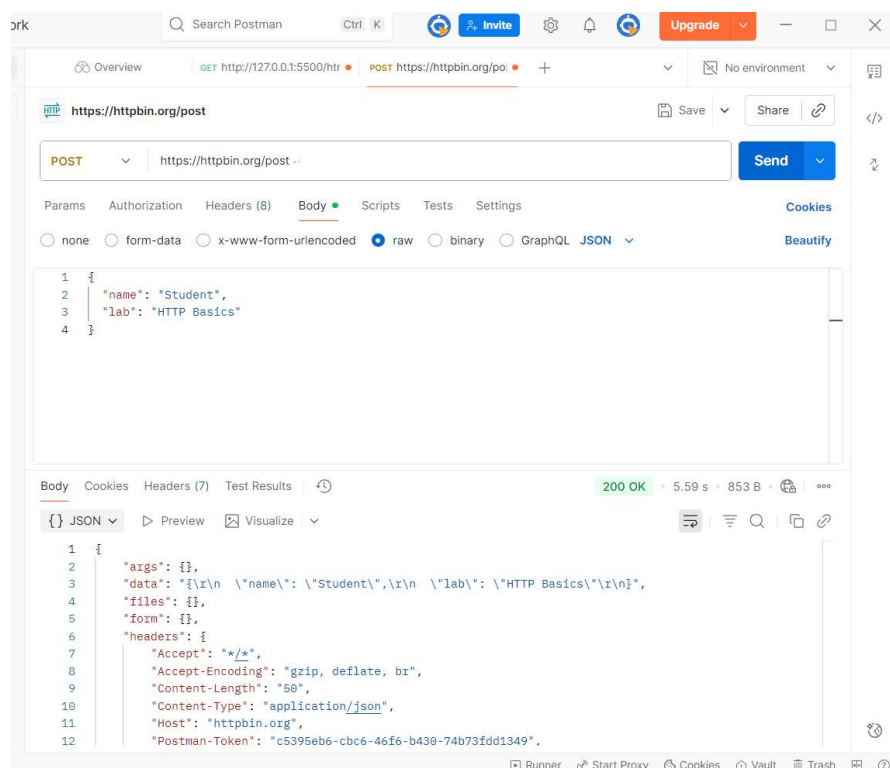
Step 3: Simulate Caching and Status Codes
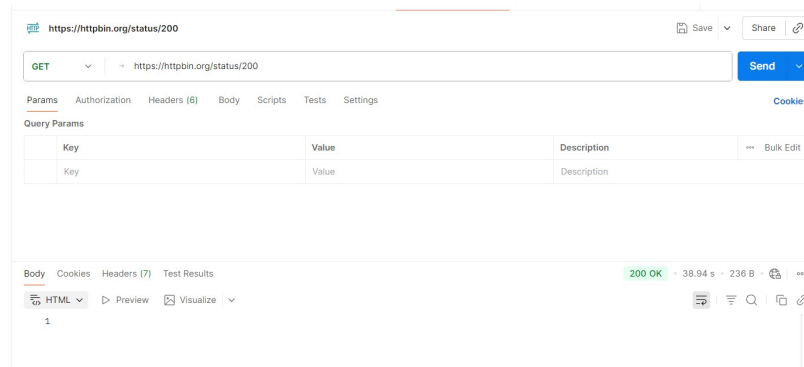
Modify HTML to simulate caching

```html
<> index.html M ×        ⓘ README.md

html > <> index.html > ⊘ html > ⊘ head > ⊘ head
    1    <!DOCTYPE html>
    2    <html>
    3    <head>
    4      <meta charset="utf-8" />
    5      <title>Lab 1</title>
    6      <head>
    7        <title>Lab 1</title>
    8        <meta http-equiv="Cache-Control" content="no-cache, no-store, must-revalidate">
    9        <meta http-equiv="Pragma" content="no-cache">
   10        <meta http-equiv="Expires" content="0">
   11        </head>
   12    </head>
   13    <body>
   14      <h1>Web Development Setup Complete!</h1>
   15    </body>
   16    </html>
```
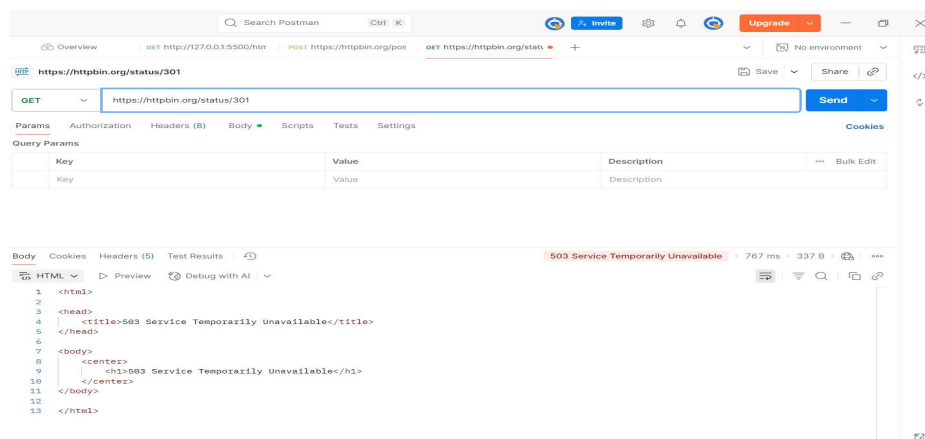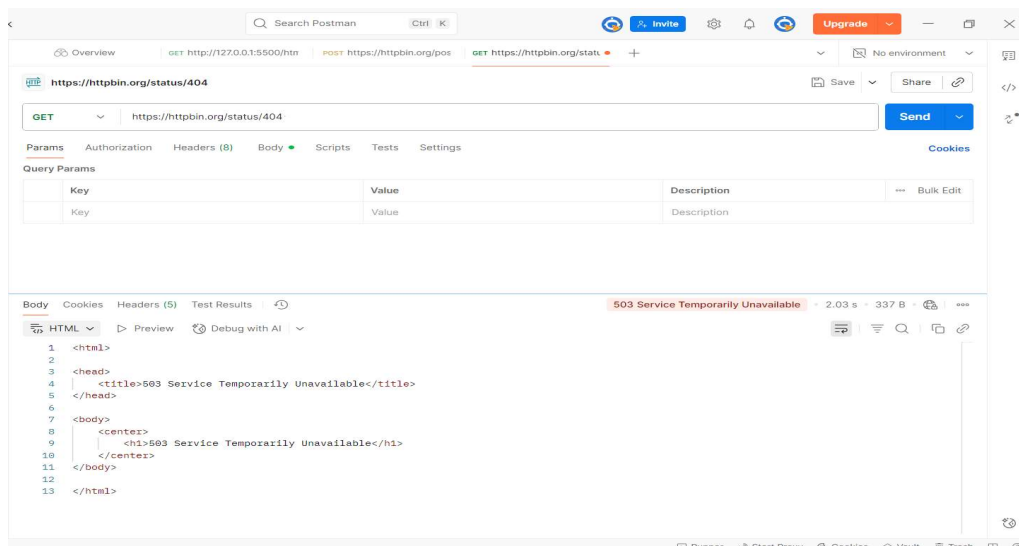
200 OK: `https://httpbin.org/status/200`

301 Redirect: https://httpbin.org/status/301

404 Not Found: https://httpbin.org/status/404

Deliverables

1. Explanations

a. Parts of a Request:

Method: Action the client wants (e.g., GET to retrieve, POST to submit).
URL: Address of the resource being targeted.
Headers: Metadata about the client or the request (e.g., User-Agent, Content-Type).
Body: Data sent with the request (only in methods like POST or PUT).

b. Parts of a Response:

Status Code: Shows the result of the request (e.g., 200= success, 404 = error).
Headers: Info about the server, content type, and caching rules.
Body: The actual content returned (e.g., HTML code, JSON data).

c. Caching Headers:

Cache-Control: no-cache, no-store
Pragma: no-cache
Expires: 0

d. Status Code Meanings:

200 OK: Request was successfully processed and the result is returned.
301 Redirect: Resource has been permanently moved to a new URL.
404 Not Found: Requested resource could not be found on the server.

CONCLUSION:

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RUBRICS:

Performance			Lab Report		
Description	**Total Marks**	**Marks Obtained**	**Description**	**Total Marks**	**Marks Obtained**
Ability to Conduct practical	5		Structure	5	
Data Analysis & Interpretation	5		Efficiency	5	
Total Marks obtained			**Total Marks Obtained**		

Instructor Signature _____