# Bansilal Ramnath Agarwal Charitable Trust’s

Vishwakarma Institute of Technology, Pune-37

*(An autonomous Institute of Savitribai Phule Pune University)*

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# Department of Computer Engineering

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| **Batch** | Batch - 2 |
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| **Division** | CS-D |
| **Subject** | Web Technologies |

**Problem Statement:** Design and develop a website to demonstrate (a) searching and sorting array for integer elements using JavaScript (b) array for named entities using JavaScript. You can make the use of bootstrap as well as jQuery.

**Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Array Operations</title>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">

<style>

.container {

display: flex;

flex-direction: row;

justify-content: space-between;

margin-top: 30px;

}

</style>

</head>

<body>

<h2 style="text-align: center; margin-bottom: 50px; margin-top: 30px">Assignment 3: Dynamic Operations Using Js On Arrays</h2>

<div class="container">

<div class="secone">

<hr>

<h4 class="seconetitle">Integer Array Search And Sort Ops</h4>

<label for="integerArray">Enter integers separated by comma: </label>

<input type="text" id="integerArray" class="form-control mb-2">

<hr>

<div style="display: flex; flex-direction: row; justify-content: space-between; align-items: center">

<button class="buttonSort" onclick="performIntegerSorting()">Sort Array</button>

<button class="buttonSearch" onclick="performIntegerSearching()">Search Value</button>

<button class="clearButton" onclick="clearIntArray()">Clear Section</button>

</div>

<hr>

<div id="integerResult" class="seconeres"></div>

</div>

<div style="border-left:1px solid #000;height:250px"></div>

<div class="sectwo">

<hr>

<h4 class="sectwotitle">Named Entity (String) Array Search</h4>

<label for="entityArray">Enter named entities separated by comma: </label>

<input type="text" id="entityArray" class="form-control mb-2">

<hr>

<div style="display: flex; flex-direction: row; justify-content: space-between; align-items: center">

<button class="buttonSearch" onclick="performEntitySearching()">Search Entity</button>

<button class="clearButton" onclick="clearStrArray()">Clear Section</button>

</div>

<hr>

<div id="entityResult" class="sectwores"></div>

</div>

</div>

<script>

function performIntegerSorting() {

const inputArray = document.getElementById('integerArray').value.split(',').map(Number);

for (let i = 0; i < inputArray.length - 1; i++) {

for (let j = 0; j < inputArray.length - i - 1; j++) {

if (inputArray[j] > inputArray[j + 1]) {

const temp = inputArray[j];

inputArray[j] = inputArray[j + 1];

inputArray[j + 1] = temp;

}

}

}

document.getElementById('integerResult').innerHTML = `

<p>Sorted Array: [${inputArray.join(', ')}]</p>

`;

}

function performIntegerSearching() {

const inputArray = document.getElementById('integerArray').value.split(',').map(Number);

const searchValue = parseInt(prompt("Enter the integer to search:"));

const foundIndex = inputArray.indexOf(searchValue);

document.getElementById('integerResult').innerHTML = `

<p>Index of ${searchValue}: ${foundIndex !== -1 ? foundIndex : 'Not found'}</p>

`;

}

function performEntitySearching() {

const inputArray = document.getElementById('entityArray').value.split(',');

const searchEntity = prompt("Enter the entity to search:");

const foundIndex = inputArray.indexOf(searchEntity);

document.getElementById('entityResult').innerHTML = `

<p>Index of ${searchEntity}: ${foundIndex !== -1 ? foundIndex : 'Not found'}</p>

`;

}

function clearIntArray(){

document.getElementById('integerArray').value = '';

document.getElementById('integerResult').innerHTML = '';

}

function clearStrArray(){

document.getElementById('entityArray').value = '';

document.getElementById('entityResult').innerHTML = '';

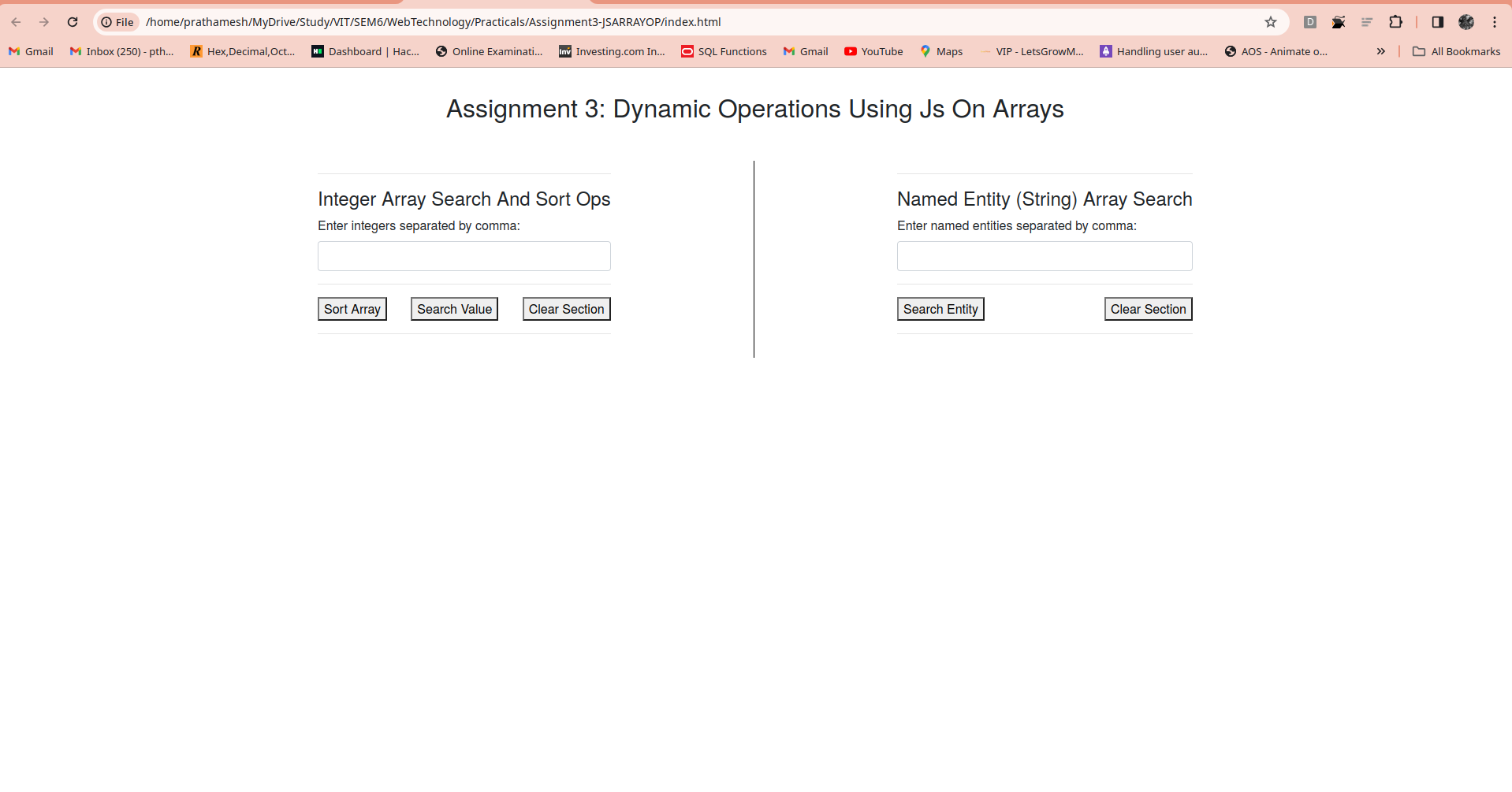
}

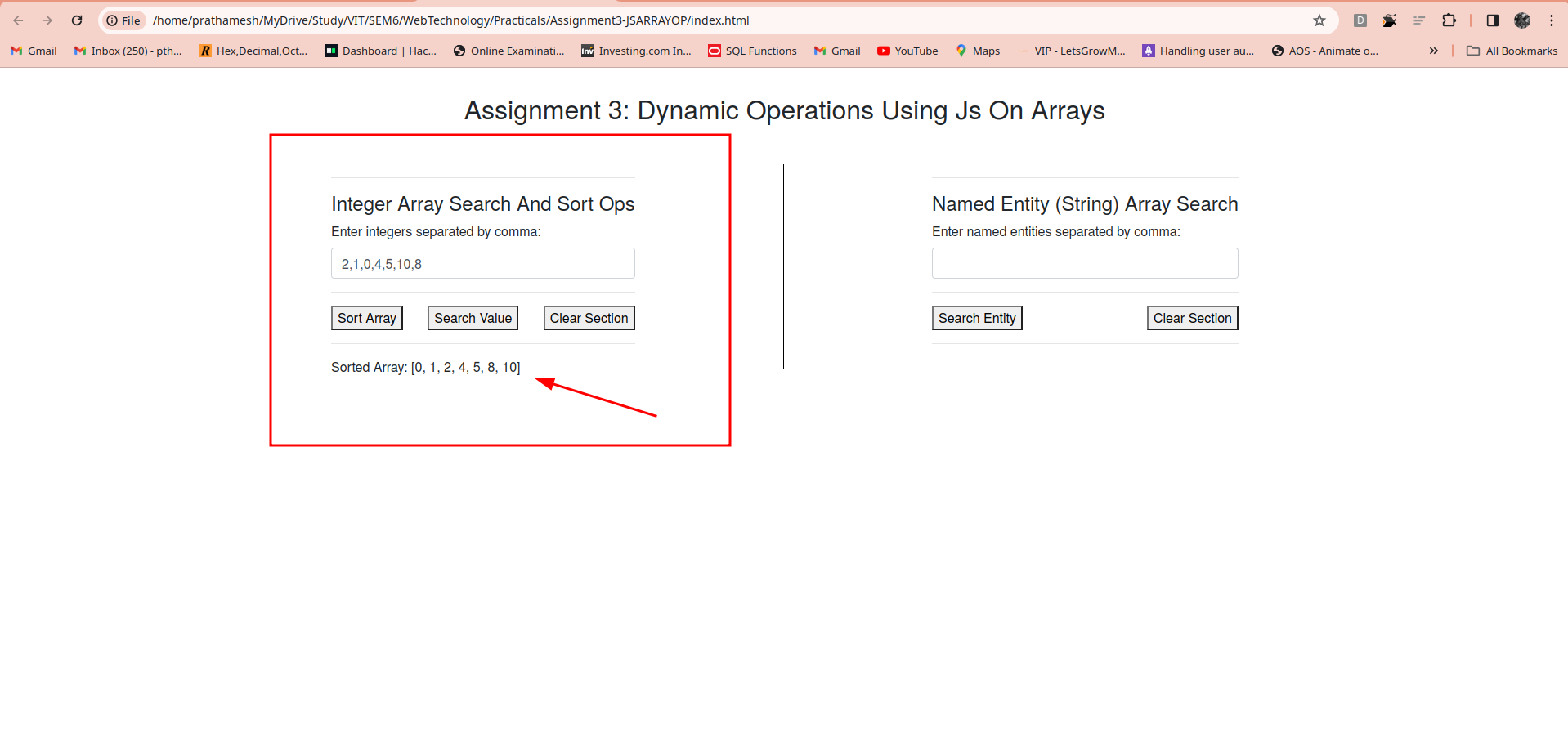
</script>

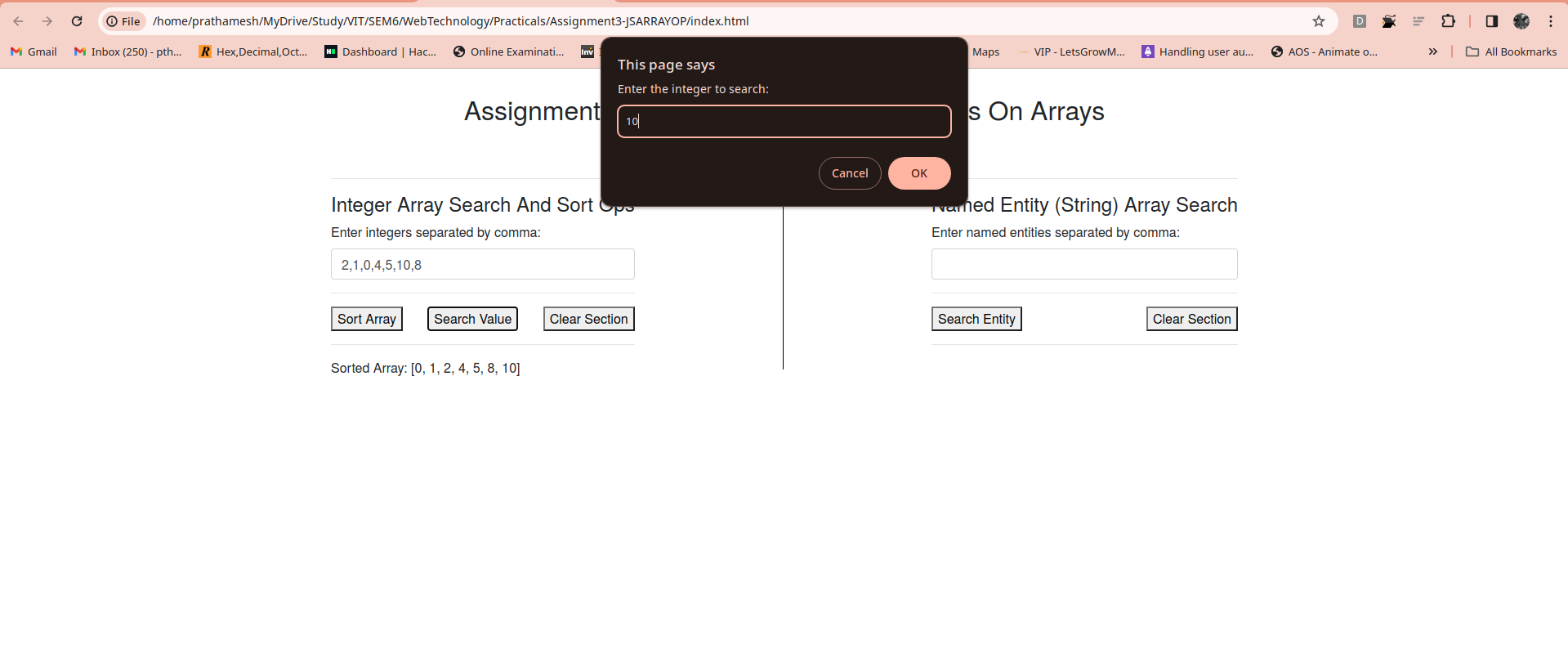
</body>

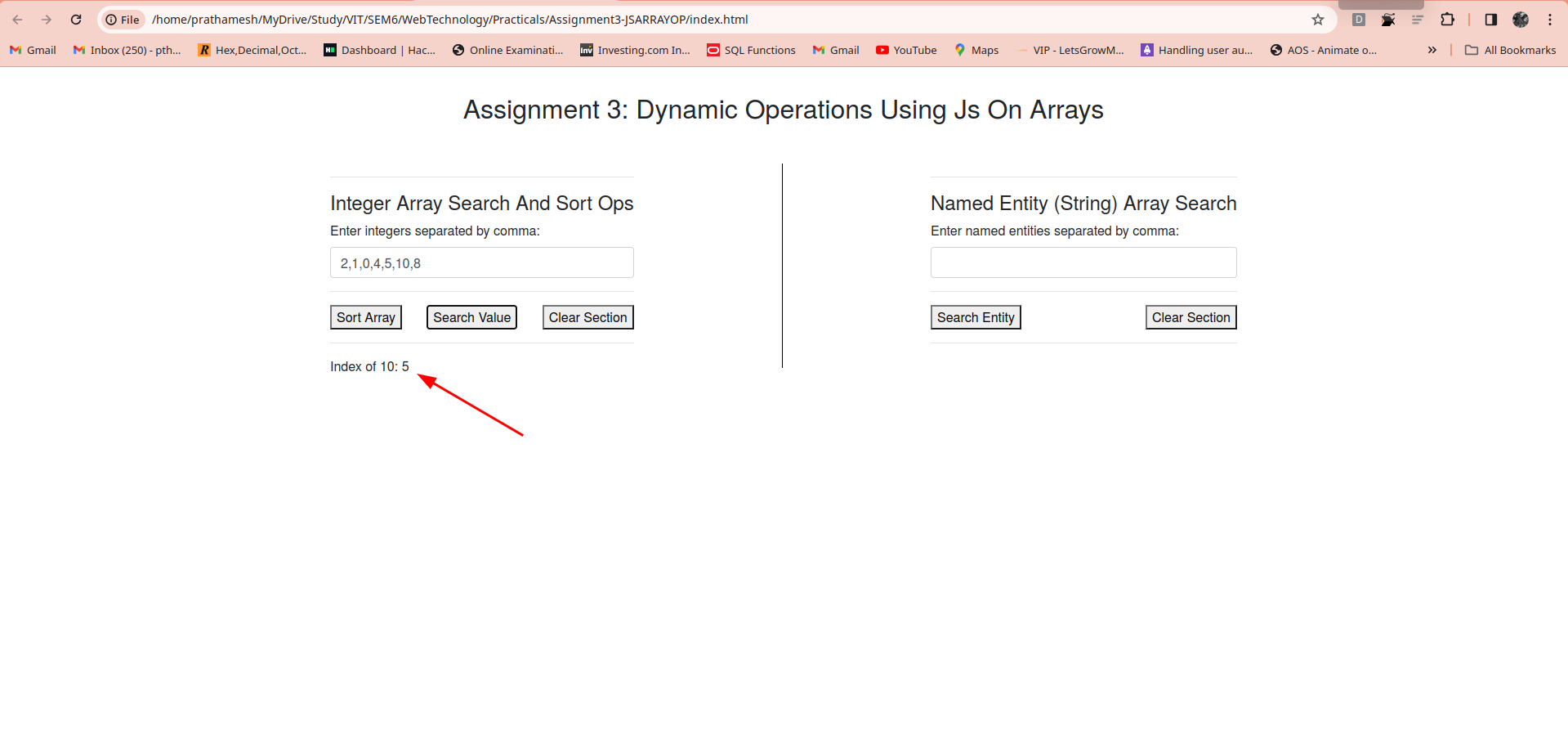
</html>

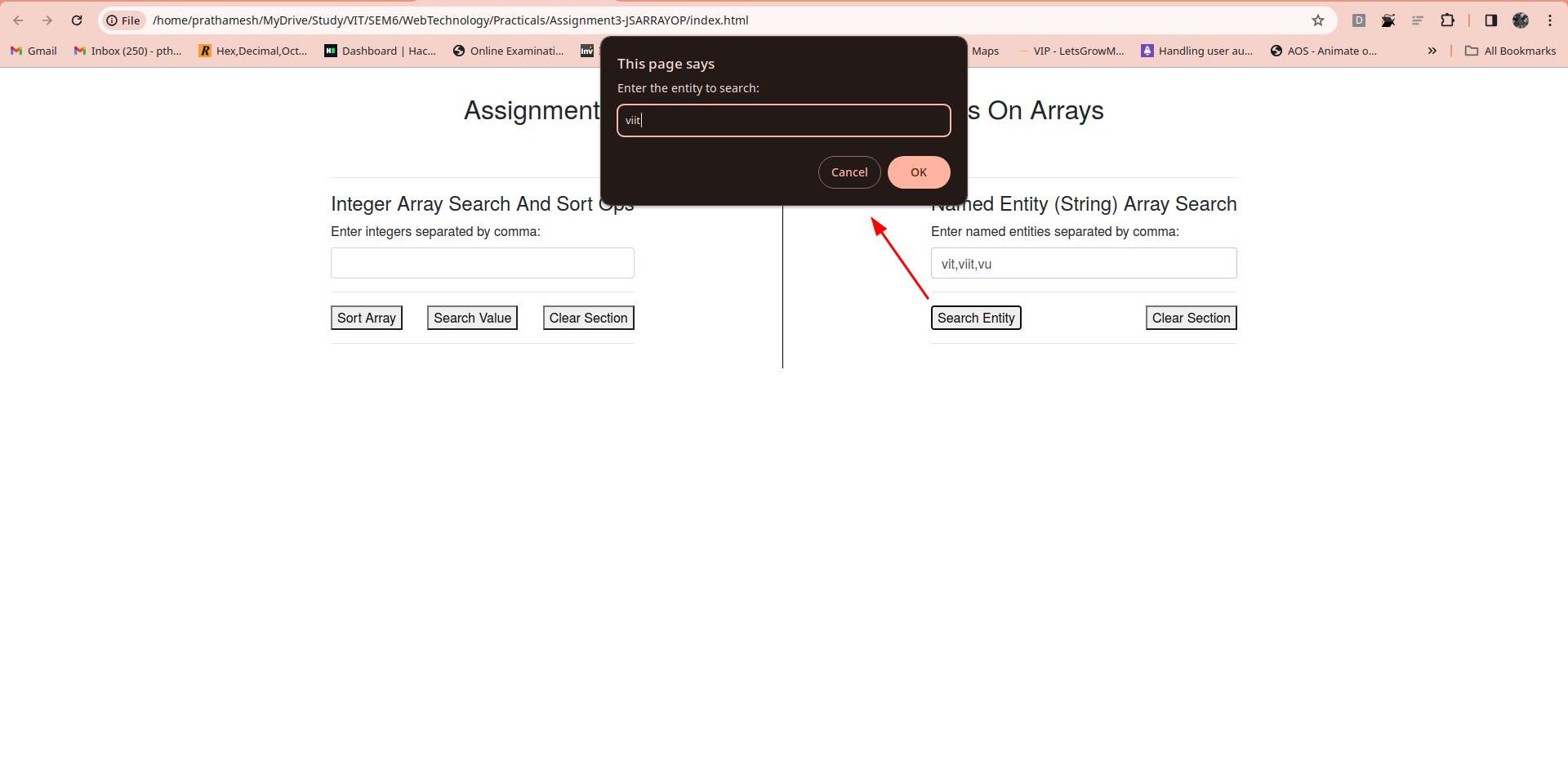
**Output:**

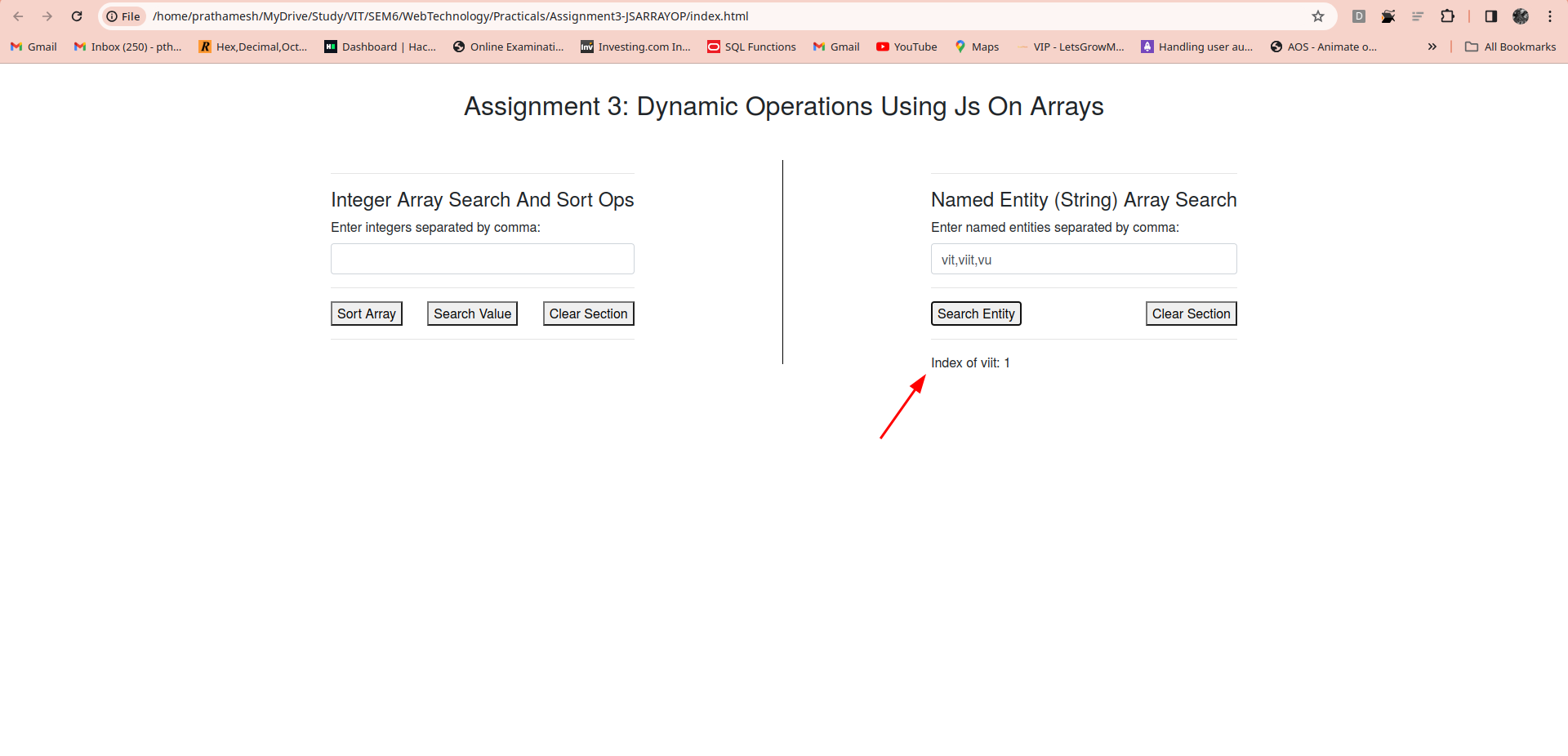
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