



Shri Vile Parle Kelavani Mandal's

**INSTITUTE OF TECHNOLOGY
DHULE (M.S.)
DEPARMENT OF COMPUTER ENGINEERING**

Subject : web technology Lab

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Batch : S4

Division: B

Expt. No. :06

Date : 07/04/2025

Title : develop and demonstrate html file that includes javascript for finding prime number in given range.

Remark

Signature

Code :

```
<!DOCTYPE html>
```

```
<html lang="en">
```

<head>

```
<meta charset="UTF-8">
```

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

<title>Prime Number Finder</title>

<style>

```
body {
```

font-family: Arial, sans-serif;

```
background-color: #f4f4f9;
```

```
display: flex;
```

```
justify-content: center;
```

align-items: center;

```
height: 100vh;
```

```
margin: 0;
```

}

```
.container {  
  background-color: #fff;  
  padding: 20px;  
  border-radius: 8px;  
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);  
  width: 300px;  
  text-align: center;  
}
```

```
h1 {  
  font-size: 24px;  
  color: #333;  
}
```

```
input {  
  padding: 10px;  
  margin: 10px;  
  width: 80%;  
  font-size: 16px;  
  border: 1px solid #ccc;  
  border-radius: 4px;  
}
```

```
button {  
  padding: 10px;  
  background-color: #4CAF50;  
  color: white;  
  border: none;
```

```
border-radius: 4px;
cursor: pointer;
font-size: 16px;
}
```

```
button:hover {
  background-color: #45a049;
}
```

```
.result {
  margin-top: 20px;
  font-size: 18px;
  color: #333;
}
```

```
.result span {
  color: green;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="container">
```

```
<h1>Find Prime Numbers</h1>
```

```
<label for="start">Start Range:</label>
```

```
<input type="number" id="start" placeholder="Enter start range" required>
```

```
<label for="end">End Range:</label>
```

```
<input type="number" id="end" placeholder="Enter end range" required>
```

```
<button onclick="findPrimeNumbers()">Find Primes</button>
```

```
<div class="result" id="result"></div>
```

```
</div>
```

```
<script>
```

```
function isPrime(num) {
```

```
  if (num <= 1) return false;
```

```
  for (let i = 2; i <= Math.sqrt(num); i++) {
```

```
    if (num % i === 0) {
```

```
      return false;
```

```
    }
```

```
  }
```

```
  return true;
```

```
}
```

```
function findPrimeNumbers() {
```

```
  let start = document.getElementById("start").value;
```

```
  let end = document.getElementById("end").value;
```

```
  let resultDiv = document.getElementById("result");
```

```
  // Validate the input
```

```
  if (start === "" || end === "" || parseInt(start) < 0 || parseInt(end) < 0 || parseInt(start) >
  parseInt(end)) {
```

```
    resultDiv.innerHTML = "<span style='color:red;'>Please enter valid start and end range
  values.</span>";
```

```
    return;
```

```
  }
```

```
  let primes = [];
```

```
for (let i = parseInt(start); i <= parseInt(end); i++) {  
  if (isPrime(i)) {  
    primes.push(i);  
  }  
}  
  
// Display result  
if (primes.length > 0) {  
  resultDiv.innerHTML = "Prime numbers in the range: <span>" + primes.join(", ") + "</span>";  
} else {  
  resultDiv.innerHTML = "No prime numbers found in the given range.";  
}  
}  
</script>  
  
</body>  
</html>
```

Find Prime Numbers

Start Range:

End Range:

Find Primes

Prime numbers in the range: 2, 3, 5,
7