

Practical – 3

AIM:

Perform the Following tasks using the JavaScript.

- **Print prime Numbers up to given value in the input box**
- **Write Script to reverse the given input string**
- **Create Dynamic Multiplication Table using inputs**
- **Find the Age from input date.(Ex. 17 Yrs, 3 Monts,13 Days)**
- **Find the No. of Days between two given dates**

Source Code:

- 1. Print prime Numbers up to given value in the input box**

Source Code:

```
<!DOCTYPE html>

<html>

<body>

<input type="text" id="inputValue" placeholder="Enter a value">

<button onclick="printPrimes()">Submit</button>

<p id="output"></p>

<script>

function printPrimes() {

    var inputValue = document.getElementById("inputValue").value;

    var output = document.getElementById("output");

    var primes = "";

    for (var i = 2; i <= inputValue; i++) {

        var isPrime = true;

        for (var j = 2; j < i; j++) {

            if (i % j === 0) {

                isPrime = false;

                break;

            }

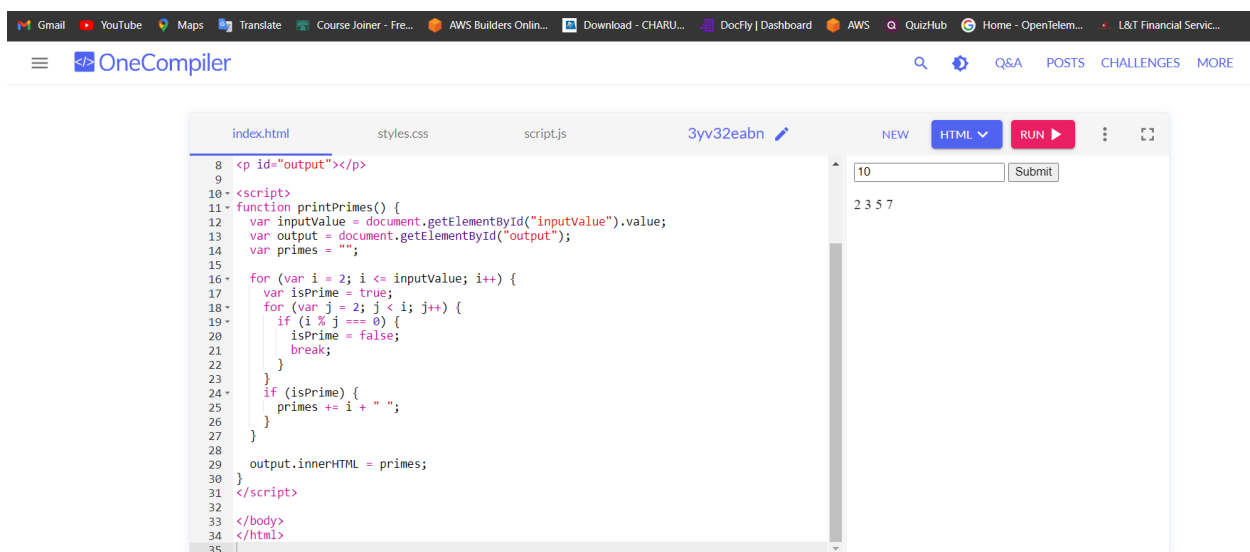
        }

    }

}
```

```
    }  
    if (isPrime) {  
        primes += i + " ";  
    }  
}  
output.innerHTML = primes;  
}  
</script>  
</body>  
</html>
```

Output:



2. Write Script to reverse the given input string**Source code:**

```
<!DOCTYPE html>

<html>

<body>


<input type="text" id="inputString" placeholder="Enter a string">

<button onclick="reverseAndDisplay()">Reverse</button>

<p id="output"></p>

<script>

function reverseAndDisplay() {

    var inputString = document.getElementById("inputString").value;

    var output = document.getElementById("output");

    output.innerHTML = reverseString(inputString);

}

function reverseString(string) {

    return string.split('').reverse().join("");

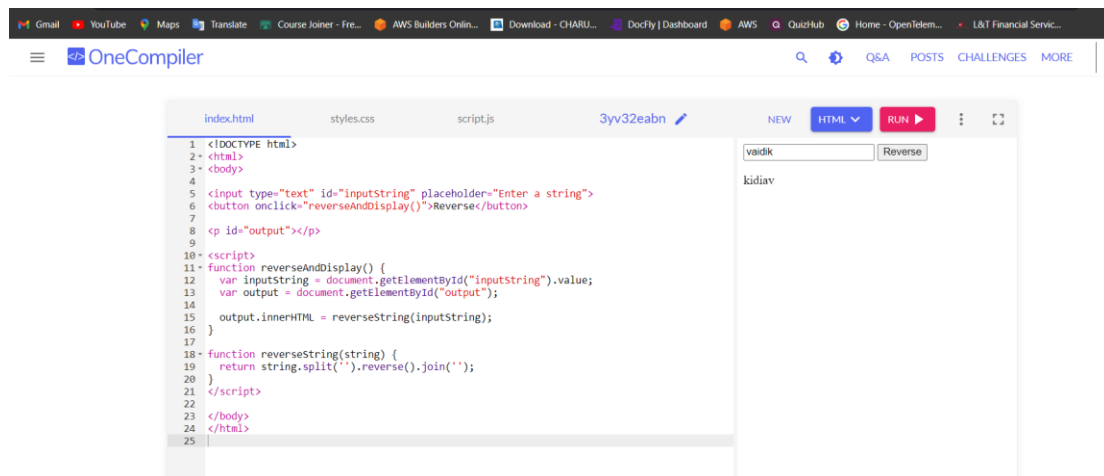
}

</script>

</body>

</html>
```

OutPut:



3. Create Dynamic Multiplication Table using inputs

Source code:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<label for="rows">Rows:</label>
```

```
<input type="number" id="rows" min="1" value="10">
```

```
<label for="cols">Columns:</label>
```

```
<input type="number" id="cols" min="1" value="10">
```

```
<button onclick="createTable()">Create Table</button>
```

```
<div id="tableContainer"></div>
```

```
<script>
```

```
function createTable() {
```

```
    var rows = document.getElementById("rows").value;
```

```
    var cols = document.getElementById("cols").value;
```

```
    var tableContainer = document.getElementById("tableContainer");
```

```
tableContainer.innerHTML = "";

var table = document.createElement("table");

table.setAttribute("border", "1");

for (var r = 1; r <= rows; r++) {

    var row = document.createElement("tr");

    for (var c = 1; c <= cols; c++) {

        var cell = document.createElement("td");

        cell.innerHTML = r * c;

        row.appendChild(cell);

    }

    table.appendChild(row);

}

tableContainer.appendChild(table);

}

</script>

</body>

</html>
```

Output:

The screenshot shows the OneCompiler online IDE with a file named 'index.html'. The code defines a JavaScript function 'createTable()' that takes user input for the number of rows and columns and dynamically generates an HTML table. The table displayed in the preview has 10 rows and 10 columns, containing sequential numbers from 1 to 100.

```

1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <label for="rows">Rows:</label>
6 <input type="number" id="rows" min="1" value="10">
7 <label for="cols">Columns:</label>
8 <input type="number" id="cols" min="1" value="10">
9 <button onclick="createTable()">Create Table</button>
10
11 <div id="tableContainer"></div>
12
13 <script>
14 function createTable() {
15   var rows = document.getElementById("rows").value;
16   var cols = document.getElementById("cols").value;
17   var tableContainer = document.getElementById("tableContainer");
18
19   // Clear previous table
20   tableContainer.innerHTML = "";
21
22   var table = document.createElement("table");
23   table.setAttribute("border", "1");
24
25   for (var r = 1; r <= rows; r++) {
26     var row = document.createElement("tr");
27     for (var c = 1; c <= cols; c++) {
28       var cell = document.createElement("td");

```

4. Find the Age from input date.(Ex. 17 Yrs, 3 Monts,13 Days)

Source Code:

```

<!DOCTYPE html>

<html>

<body>

<label for="birthdate">Birthdate:</label>

<input type="date" id="birthdate">

<button onclick="calculateAge()">Calculate Age</button>

<p id="output"></p>

<script>

function calculateAge() {

    var birthdate = new Date(document.getElementById("birthdate").value);

    var today = new Date();

    var ageInMilliseconds = today - birthdate;

```

```

var ageInSeconds = ageInMilliseconds / 1000;

var ageInMinutes = ageInSeconds / 60;

var ageInHours = ageInMinutes / 60;

var ageInDays = ageInHours / 24;

var ageInMonths = ageInDays / 30.44;

var ageInYears = ageInMonths / 12;

var years = Math.floor(ageInYears);

var months = Math.floor(ageInMonths % 12);

var days = Math.floor(ageInDays % 30.44);

var output = document.getElementById("output");

output.innerHTML = years + " Yrs, " + months + " Monts, " + days + " Days";

}

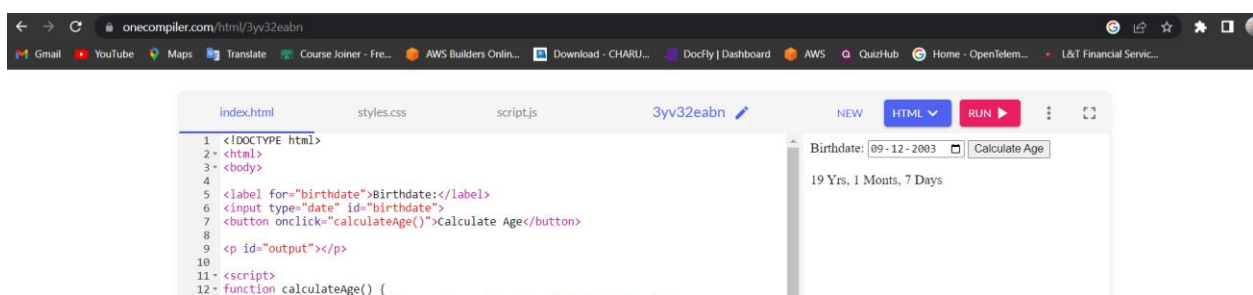
</script>

</body>

</html>

```

Output:



5. Find the No. of Days between two given dates

Source code:

```
<!DOCTYPE html>
```

```
<html>

<body>

<label for="startdate">Start Date:</label>

<input type="date" id="startdate">

<label for="enddate">End Date:</label>

<input type="date" id="enddate">

<button onclick="calculateDays()">Calculate Days</button>

<p id="output"></p>

<script>

function calculateDays() {

    var startdate = new Date(document.getElementById("startdate").value);

    var enddate = new Date(document.getElementById("enddate").value);

    var timeDiff = Math.abs(enddate.getTime() - startdate.getTime());

    var diffDays = Math.ceil(timeDiff / (1000 * 3600 * 24));

    var output = document.getElementById("output");

    output.innerHTML = diffDays + " days";

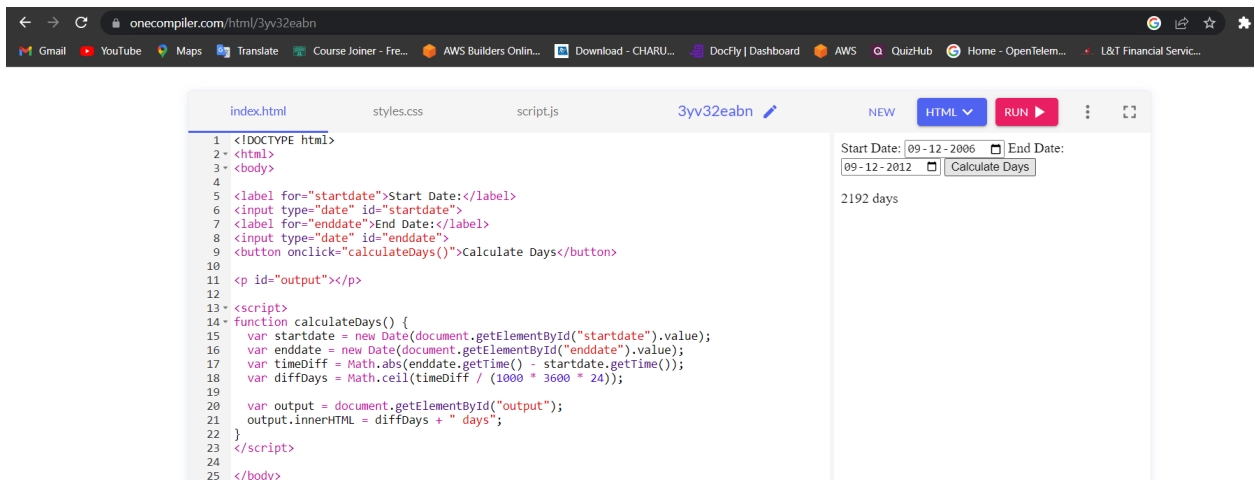
}

</script>

</body>

</html>
```

Output:



```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <label for="startdate">Start Date:</label>
6 <input type="date" id="startdate">
7 <label for="enddate">End Date:</label>
8 <input type="date" id="enddate">
9 <button onclick="calculateDays()">Calculate Days</button>
10
11 <p id="output"></p>
12
13 <script>
14 function calculateDays() {
15   var startdate = new Date(document.getElementById("startdate").value);
16   var enddate = new Date(document.getElementById("enddate").value);
17   var timeDiff = Math.abs(enddate.getTime() - startdate.getTime());
18   var diffDays = Math.ceil(timeDiff / (1000 * 3600 * 24));
19
20   var output = document.getElementById("output");
21   output.innerHTML = diffDays + " days";
22 }
23 </script>
24
25 </body>
```

Start Date: 09-12-2006 End Date: 09-12-2012 Calculate Days

2192 days

Conclusion:

Threw loops and strings this all are used for various ttpе of logic and ouput.

Course Outcome:

This all type of method is used for good and efficient output.