

2030 – DINESH K LOHAR

ASSIGNMENT 5

JAVASCRIPT ASSIGNMENT-1 (PROGRAMS)

Q.1 Write JavaScript code for

A)Performing various Mathematical Operations such as

- 1) Calculating Factorial
- 2) Finding Fibonacci Series
- 3) Displaying Prime Numbers in a given range
- 4) Evaluating Expressions
- 5) Calculating reverse of a number

SOURCE CODE:-

```
<!--Dinesh K Lohar 2030-->
<!--A)Performing various Mathematical Operations-->
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>Maths Operations</title>
<style>
p {
font-size: 30px;
font-family: Cambria;
font-weight: bold;
}
body {
background-image: url("bg.jpeg");
background-size: cover;
}
.button {
border: none;
color: white;
padding: 20px 32px;
text-align: center;
text-decoration: none;
display: inline-block;
```

```

font-size: 26px;

margin: 4px 2px;

transition-duration: 0.4s;

cursor: pointer;
}

.button1 {

background-color: white;

color: black;

border: 2px solid #4a0075;

}

.button1:hover {

background-color: #8eff24;

color: black;

}
</style>

<script type="text/javascript">

//1) Calculating Factorial

function factorial() {

var a, b, fact;

a = parseInt(prompt("Enter the Number: "));

b = 1;

fact = 1;

while (b <= a) {

fact = fact * b;

b = b + 1;

}

document.getElementById("demo").innerHTML = "Factorial of " + a + " is <br>" + fact;

}

//2) Finding Fibonacci Series

function fibonacci() {

var var1 = 0;

var var2 = 1;

var var3;

var num = prompt("Enter the limit for Series: ", 0);

if ((num == null) || (num == 0)) {

document.getElementById("demo").innerHTML = "The Fibonacci Series of " + num + " is <br> 0";

```

```

} else {

    var Str1 = "The Fibonacci Series of " + num + " is <br>" + var1 + "<br>" + var2 + "<br>";

    document.write(Str1.fontSize(6));

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

        var3 = var1 + var2;

        var1 = var2;

        var2 = var3;

        var Str2 = var3 + "<br>";

        document.write(Str2.fontSize(6));

    }

}

}

```

//3) Displaying Prime Numbers in a given range

```

function prime_number() {

    var first = prompt("Enter the Lower Range Number : ");

    var last = prompt("Enter the Upper Range Number : ");

    var i, j, isPrime;

    document.write(("The Prime Numbers between " + first + " and " + last + " is <br>").fontSize(6));

    for (i = first; i <= last; i++) {

        if ((i == 1) || (i == 0)) {

            continue;

        }

        isPrime = 1;

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

            if (i % j == 0) {

                isPrime = 0;

                break;

            }

        }

        if (isPrime == 1) {

            var Str = i + "<br>";

            document.write(Str.fontSize(6));

        }

    }

}

```

//4) Evaluating Expressions

```

function expressions() {

    var exp, r;

    exp = prompt("Enter the Expression for Evaluation:");

    r = eval(exp);

    document.getElementById("demo").innerHTML = "The Answer of Expression " + exp + " is <br>" + r;

}

//5) Calculating reverse of a number

function reverse() {

    var n = prompt("Enter a Number : ");

    Str = "The Reversed Number of " + n + " is <br>";

    var digit, result = 0;

    while (n) {

        digit = n % 10;

        result = (result * 10) + digit;

        n = n / 10 | 0;

    }

    return document.getElementById("demo").innerHTML = Str + result;

}

</script>

</head>

<body>

<center>

<h1>MATHEMATICAL OPERATIONS</h1>

<br><br><br>

<button class="button button1" type="button" onclick="factorial()">Factorial</button>

<button class="button button1" type="button" onclick="fibonacci()">Fibonacci Series</button>

<button class="button button1" type="button" onclick="prime_number()">Prime Numbers</button>

<button class="button button1" type="button" onclick="expressions()">Evaluate Expression</button>

<button class="button button1" type="button" onclick="reverse()">Reverse of a Number</button>

<br><br>

<p id="demo"></p>

</center>

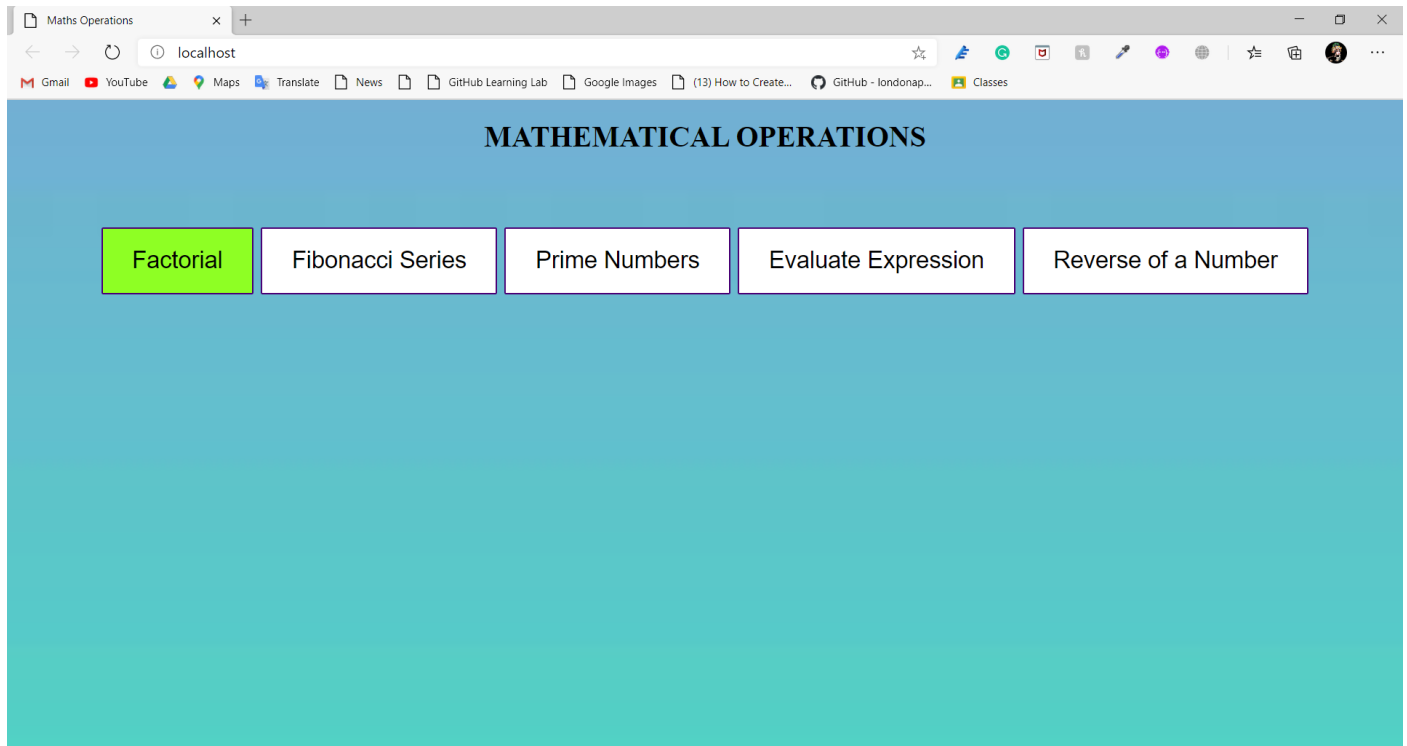
</body>

</html>

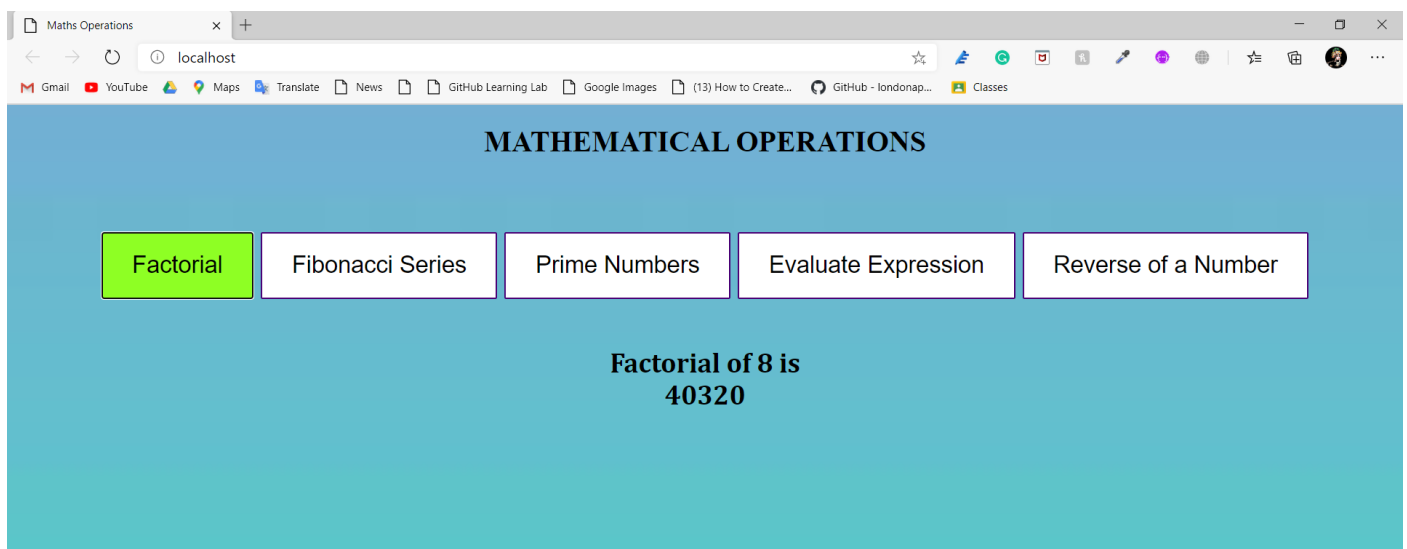
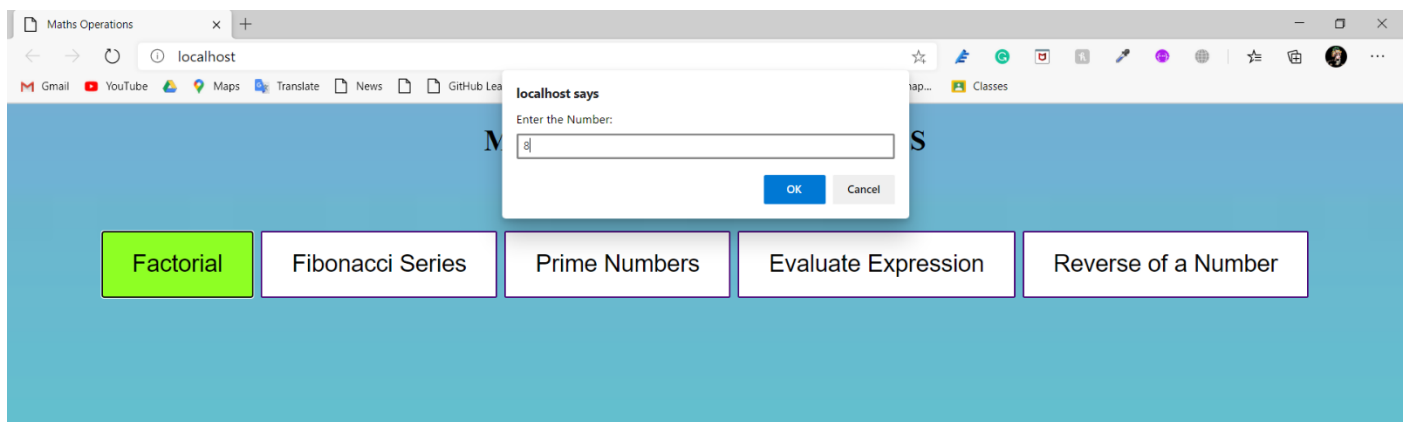
```

OUTPUT:-

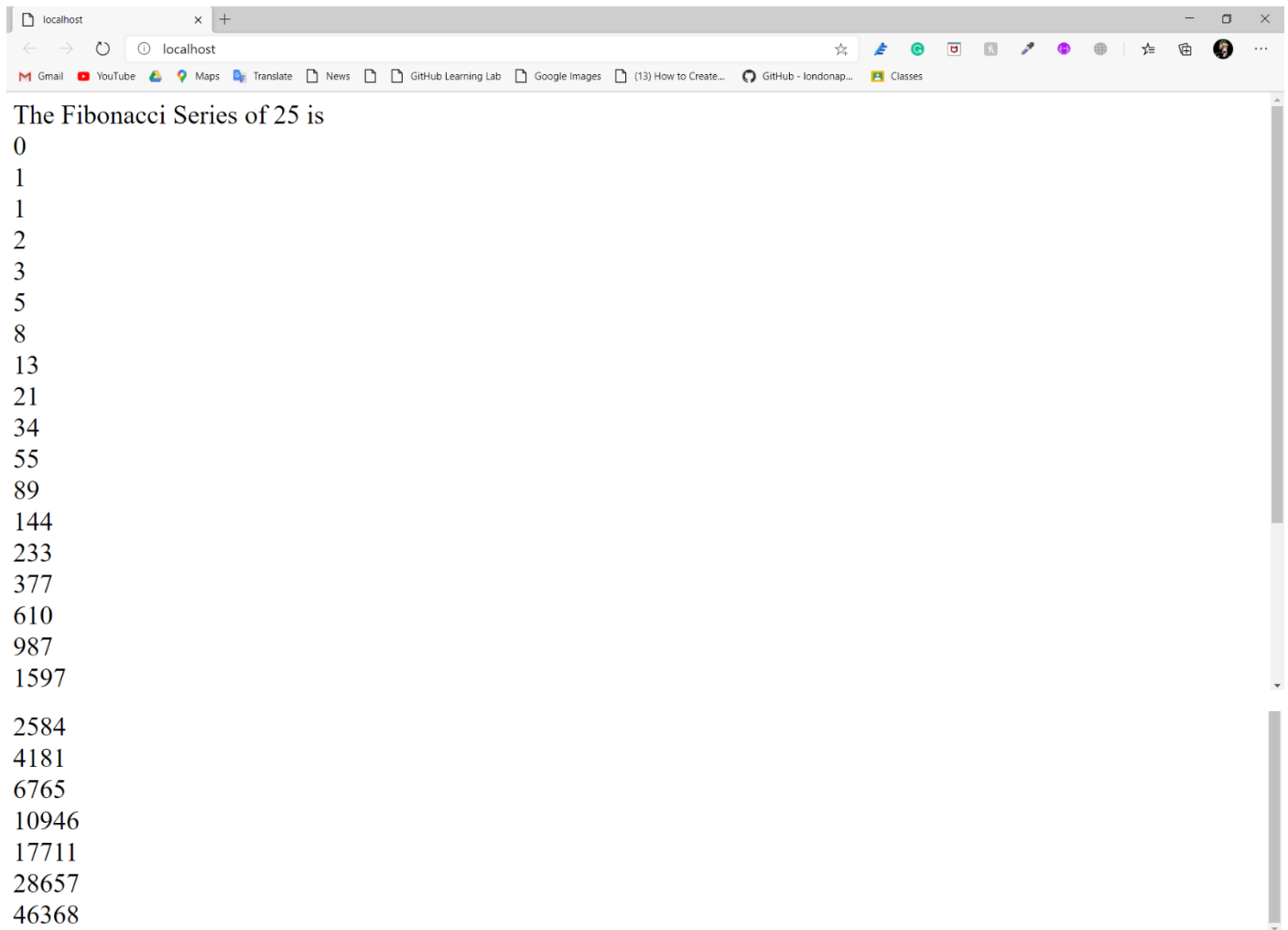
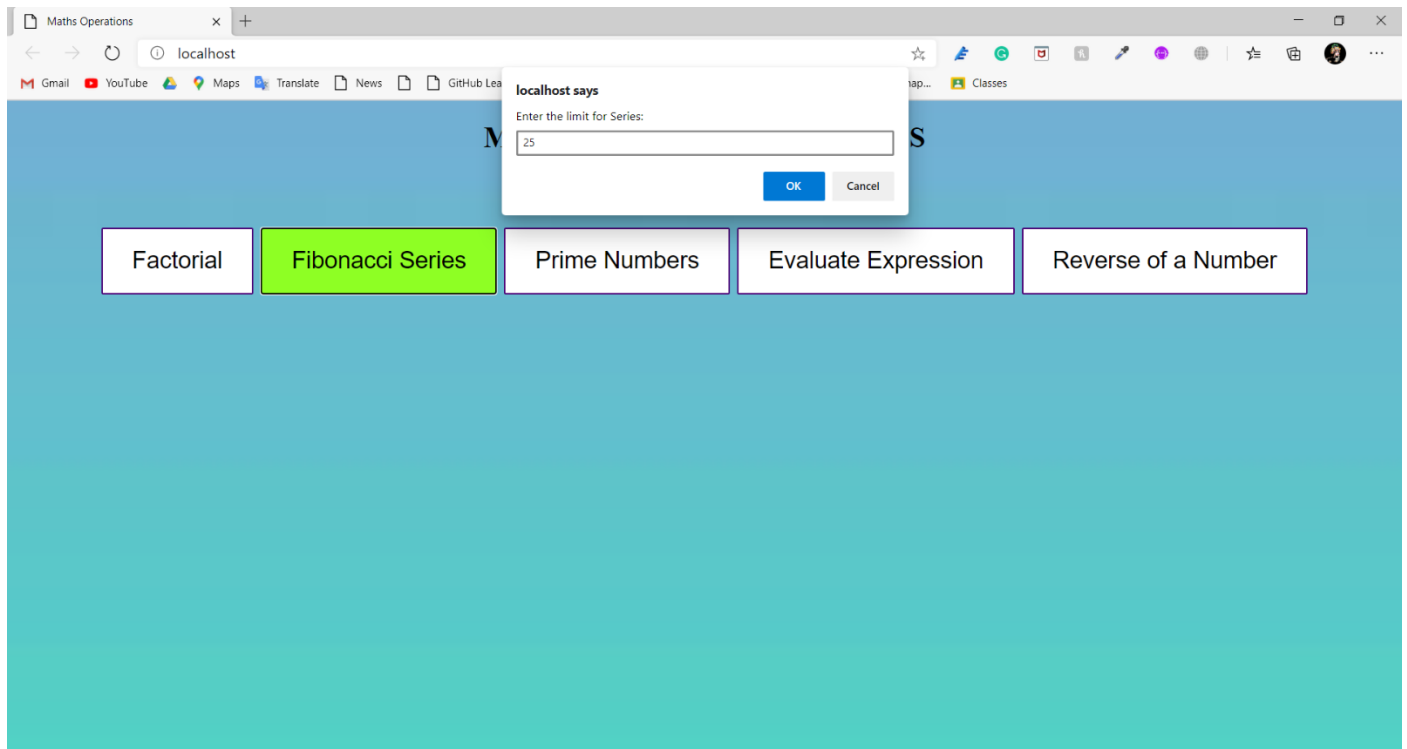
Home Page



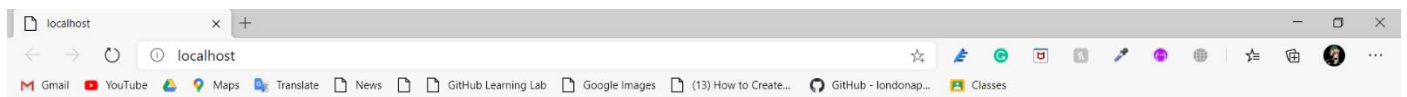
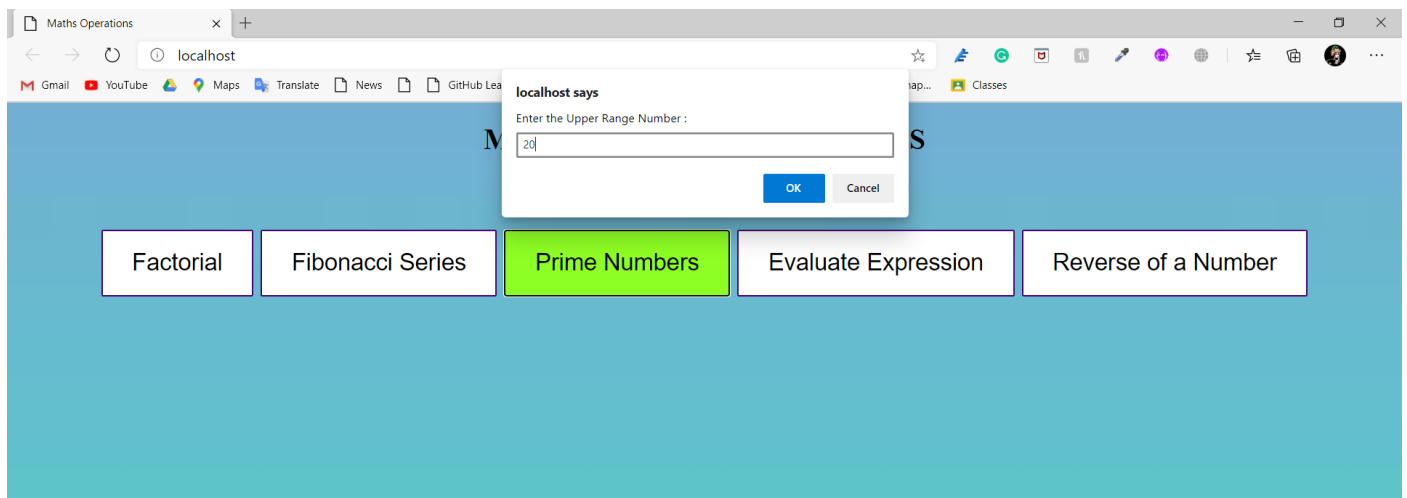
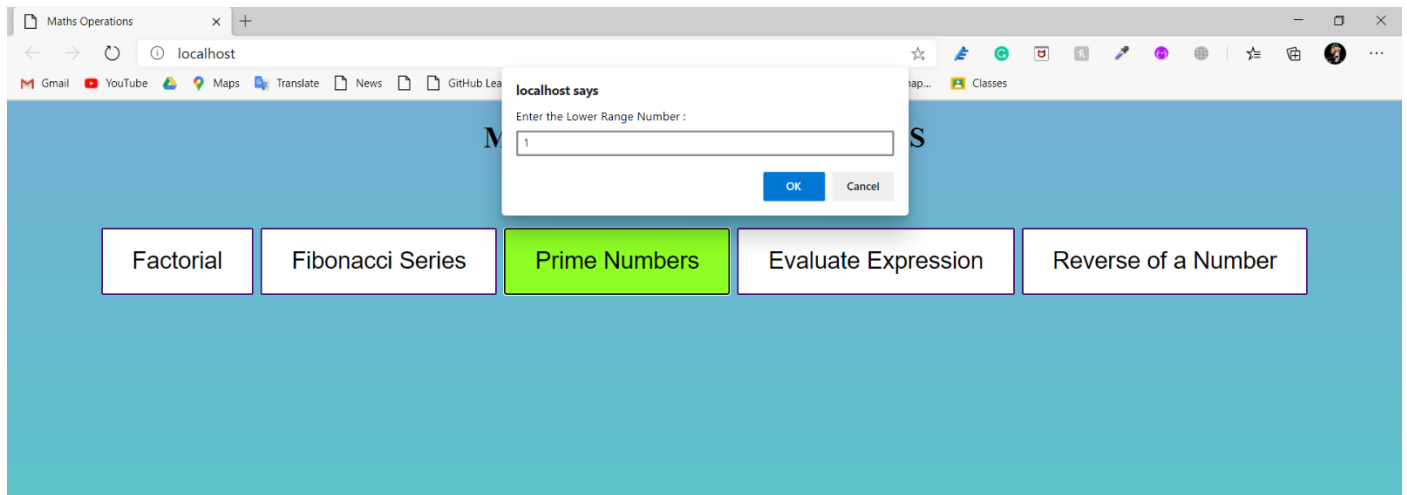
Factorial



Fibonacci Series



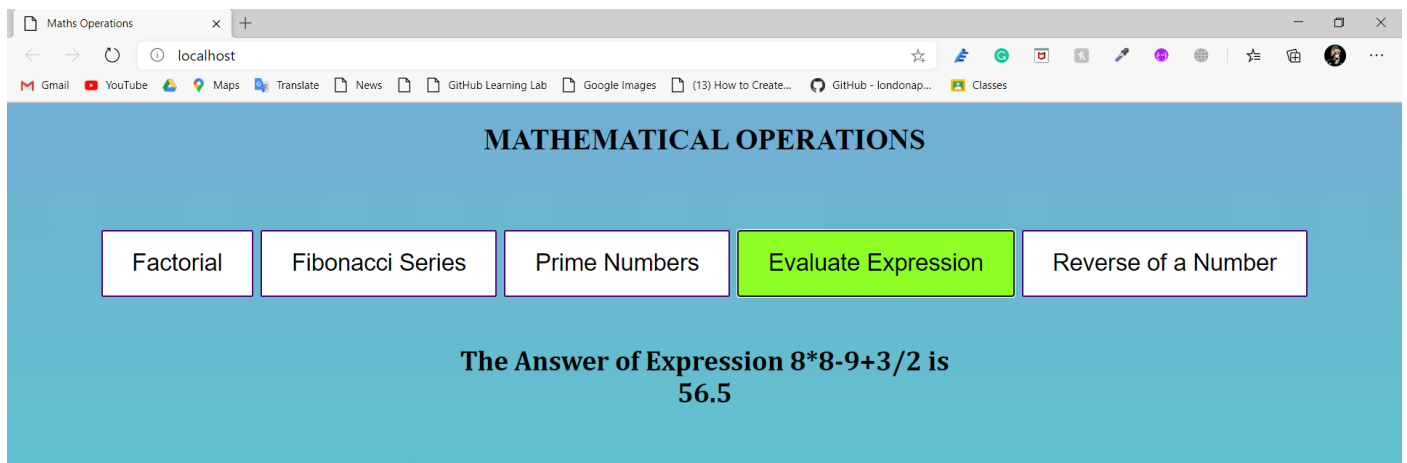
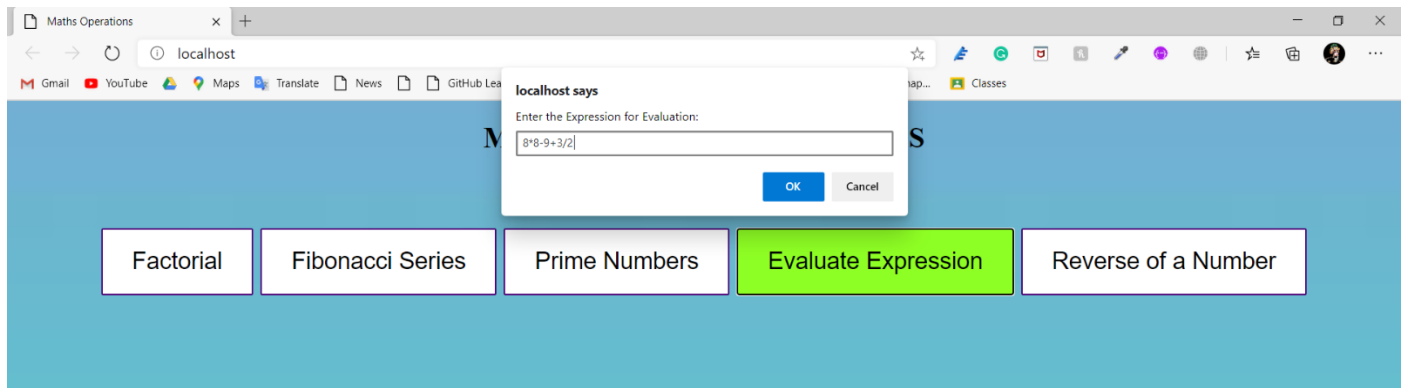
Prime Numbers



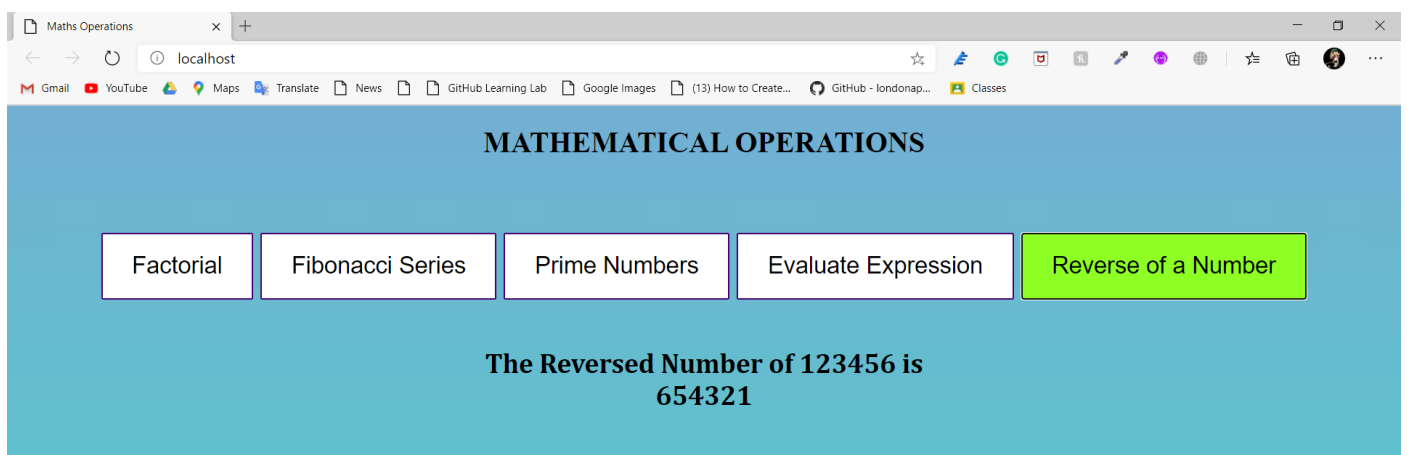
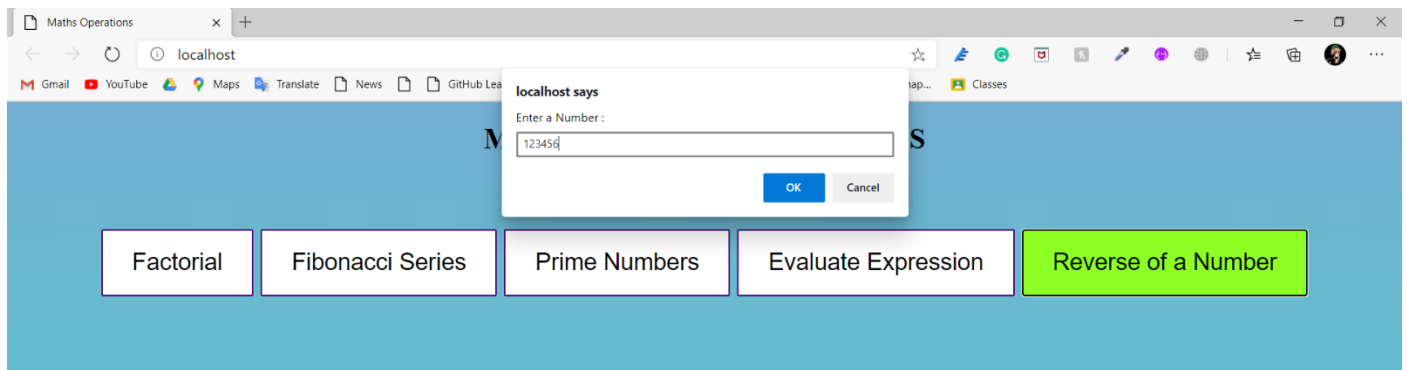
The Prime Numbers between 1 and 20 is

2
3
5
7
11
13
17
19

Evaluate Expression



Reverse of a Number



B) Validating the various Form Elements(Registration Form)

SOURCE CODE:-

```
<!--Dinesh K Lohar 2030-->

<!--B) Validating the various Form Elements(Registration Form)-->

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>Registration Form</title>

<style media="screen">

p {

    font-size: 26px;

    font-family: Cambria;

    font-weight: bold;

}

body {

    background-image: url("bg2.jpg");

    background-size: cover;

}

</style>

<script type="text/javascript">

function validation() {

    var str = document.register;

    var r1 = str.email.value.indexOf('@'); //for email requirement 1

    var r2 = str.email.value.indexOf('.'); //for email requirement 2

    if (str.name.value.length < 4) {

        alert("Enter your Full Name!");

        str.name.focus();

    } else if (isNaN(str.name.value) == false) {

        alert("Enter a valid Name!");

        str.name.select();

    } else if (r1 <= 0 || r2 <= 0 || r2 - r1 <= 2) {

        alert("Enter a valid Email Address!");

        str.email.focus();

    } else if ((isNaN(str.contact.value == true)) || (str.contact.value.length != 10)) {

        alert("Enter a valid Contact Number!");

    }

}
```

```

    str.contact.slect();
} else if (str.location.value.length <= 0) {
    alert("Enter your Location!");
    str.location.select();
} else if ((isNaN(str.pin.value == true)) || (str.pin.value.length != 6)) {
    alert("Enter a valid 6 digits Pincode!");
    str.pin.select();
} else {
    document.getElementById("output").innerHTML = "The Form is Submitted Successfully. I hope you'll enjoy the classes.";
}
}
</script>
</head>
<body>
<center>
<h1>REGISTER YOURSELF FOR WEB PROGRAMMING CLASSES</h1>
<h3>Organized By Madam Reshma Desai</h3><br><br>
<h3>Learner's Detail</h3>
<form name="register">
    <label>Name : </label>
    <input type="text" name="name" placeholder="Enter your Name" size="50"><br><br>
    <label>Email ID : </label>
    <input type="text" name="email" placeholder="Enter your Email ID" size="47"><br><br>
    <label>Contact No. : </label>
    <input type="text" name="contact" placeholder="Enter your Contact Number" size="45"><br><br>
    <label>Location : </label>
    <input type="text" name="location" placeholder="Enter your Location" size="48"><br><br>
    <label>Pincode No. : </label>
    <input type="text" name="pin" placeholder="Enter your Pincode/Zipcode" size="45"><br><br>
</form>
<button onclick="validation()">SUBMIT</button>
<p id="output"></p>
</center>
</body>
</html>

```

OUTPUT:-

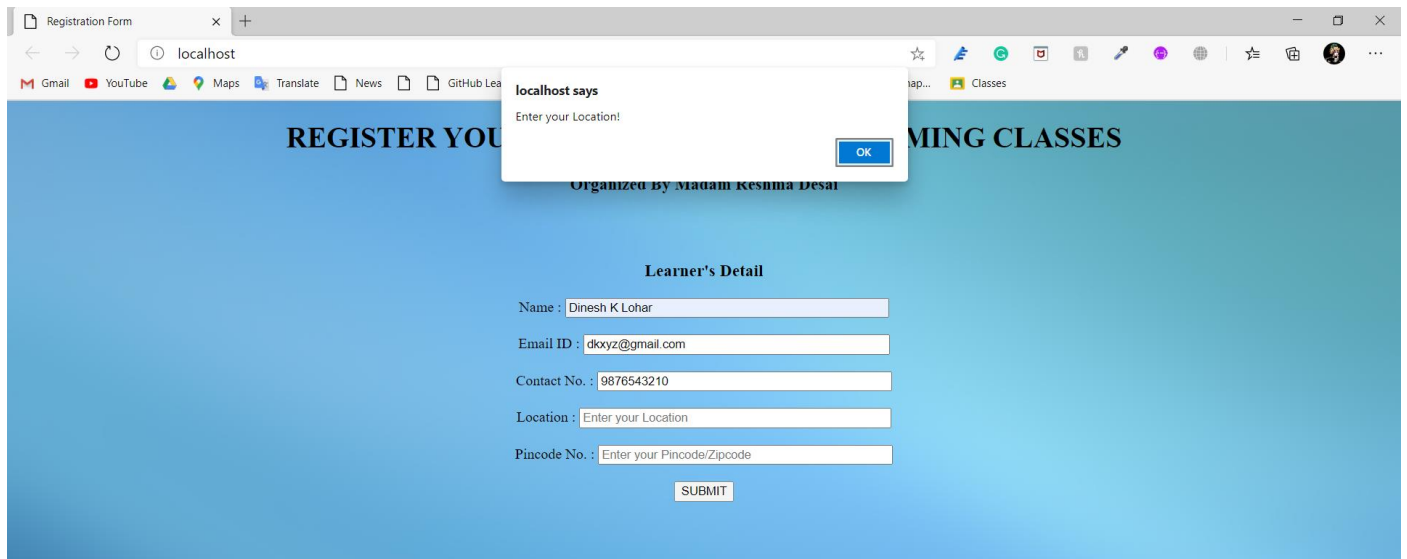
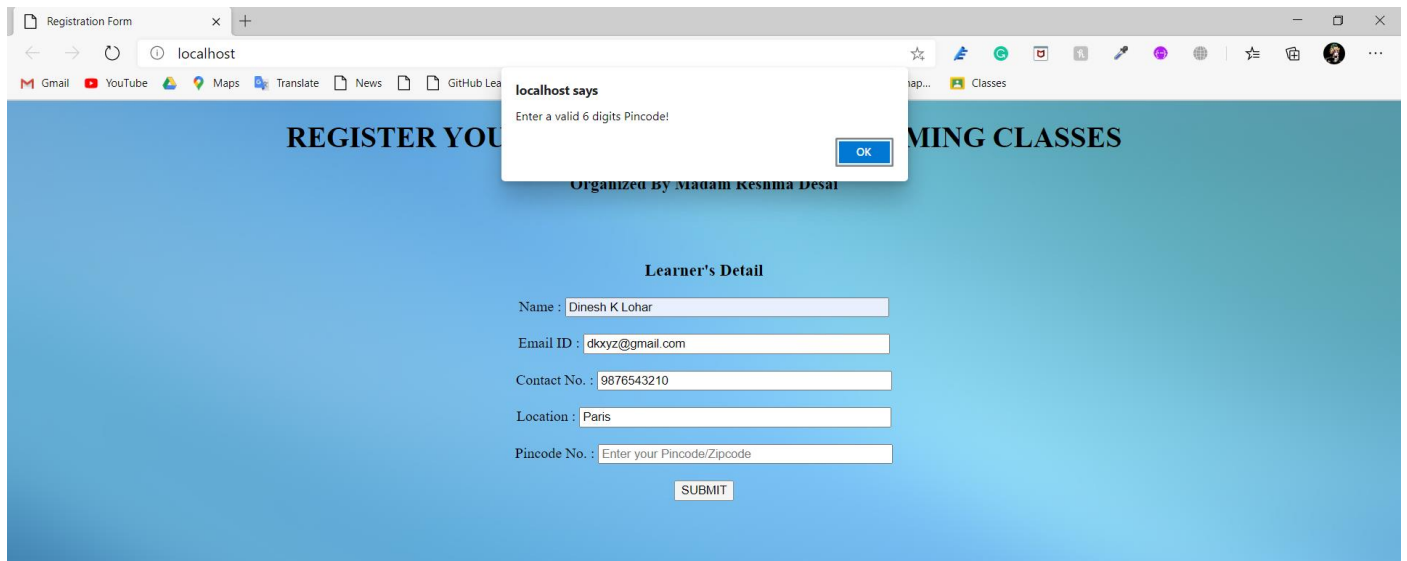
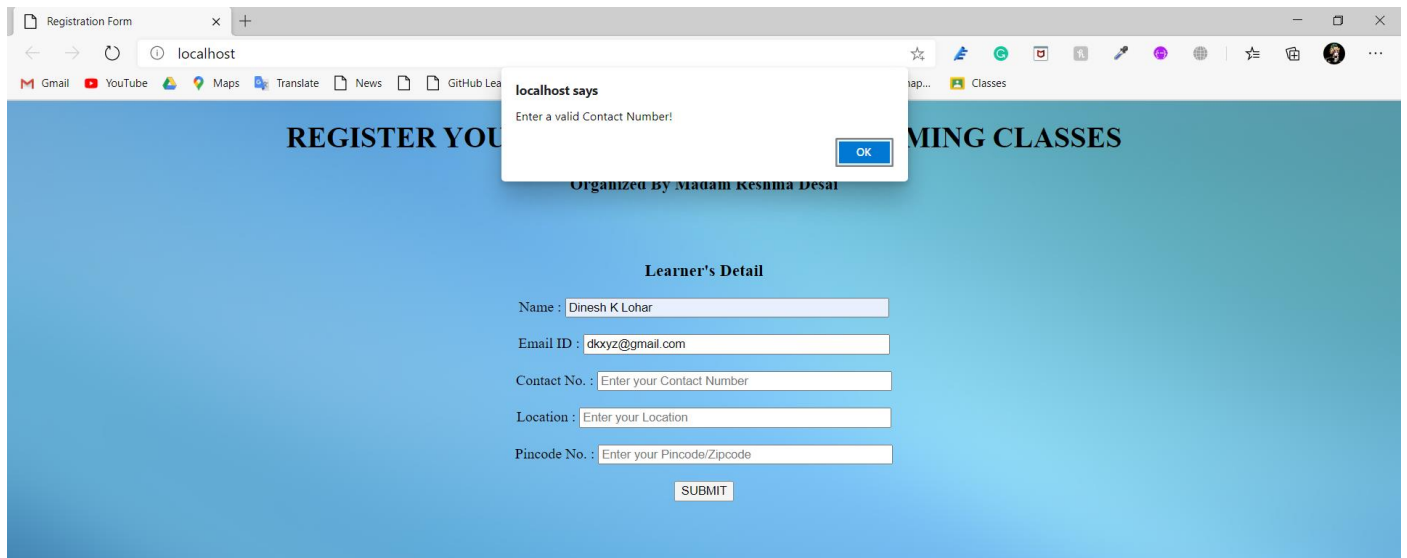
Home Page

The screenshot shows a web browser window with the title "Registration Form" and the address bar set to "localhost". The page has a blue gradient background. At the top, the text "REGISTER YOURSELF FOR WEB PROGRAMMING CLASSES" is displayed in bold, black, uppercase letters. Below this, it says "Organized By Madam Reshma Desai". In the center, there is a section titled "Learner's Detail" with five input fields: "Name : Enter your Name", "Email ID : Enter your Email ID", "Contact No. : Enter your Contact Number", "Location : Enter your Location", and "Pincode No. : Enter your Pincode/Zipcode". A "SUBMIT" button is located below the input fields.

Validation Alerts

This screenshot shows the same registration form as above, but with a validation alert displayed. The alert is a white box with a black border, titled "localhost says", and contains the text "Enter your Full Name!". An "OK" button is at the bottom right of the alert. The "Name" input field is highlighted with a red border, indicating it is the source of the error.

This screenshot shows the registration form with another validation alert. The alert is titled "localhost says" and contains the text "Enter a valid Email Address!". An "OK" button is at the bottom right of the alert. The "Email ID" input field is highlighted with a red border, indicating it is the source of the error.



Registration Form

localhost

Gmail YouTube Maps Translate News GitHub Learning Lab Google Images (13) How to Create... GitHub - londonap... Classes

REGISTER YOURSELF FOR WEB PROGRAMMING CLASSES

Organized By Madam Reshma Desai

Learner's Detail

Name :

Email ID :

Contact No. :

Location :

Pincode No. :

The Form is Submitted Successfully. I hope you'll enjoy the classes.