

OSTL LAB

Week 8 Assignment Submission

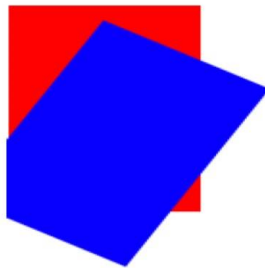
Swamiraju Satya Praveen Varma

200905044

Batch B1

10

1. Write the HTML5 program to display the following using canvas tag. Give different colour for the rectangles.



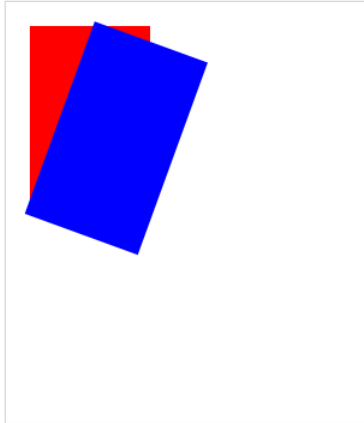
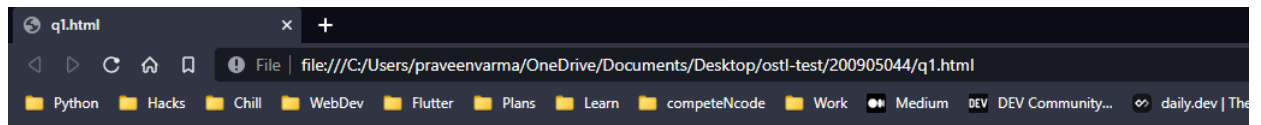
Solution:-

```
<!DOCTYPE html>
<html>
<body>
```

```
<canvas id="myCanvas" width="300" height="350" style="border:1px solid #d3d3d3;">
Your browser does not support the HTML5 canvas tag.</canvas>
```

```
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.fillStyle = "#FF0000";
ctx.fillRect(20, 20, 100, 150);
ctx.fillStyle = "#0000FF";
ctx.rotate(20 * Math.PI / 180);
ctx.fillRect(75, -10, 100, 170);
</script>
```

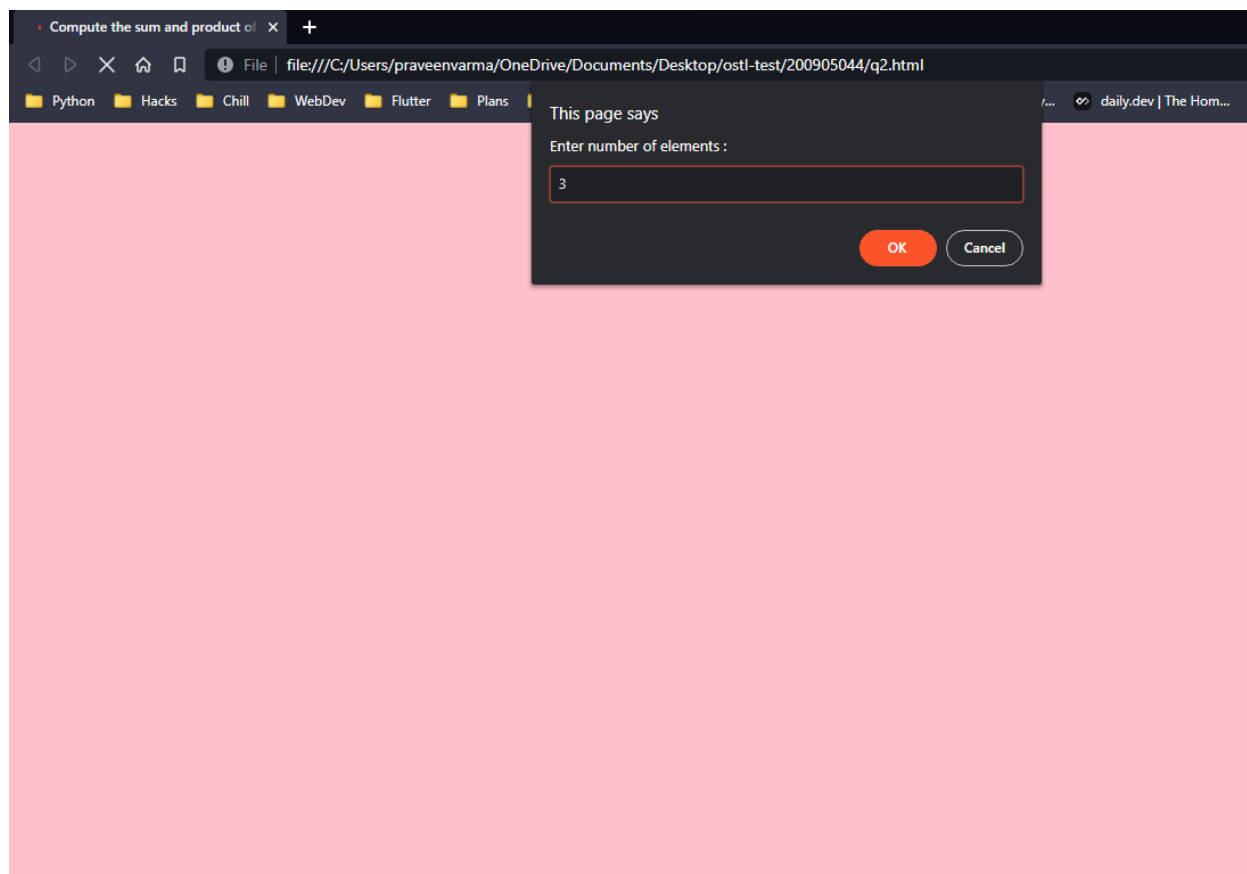
```
</body>
</html>
```

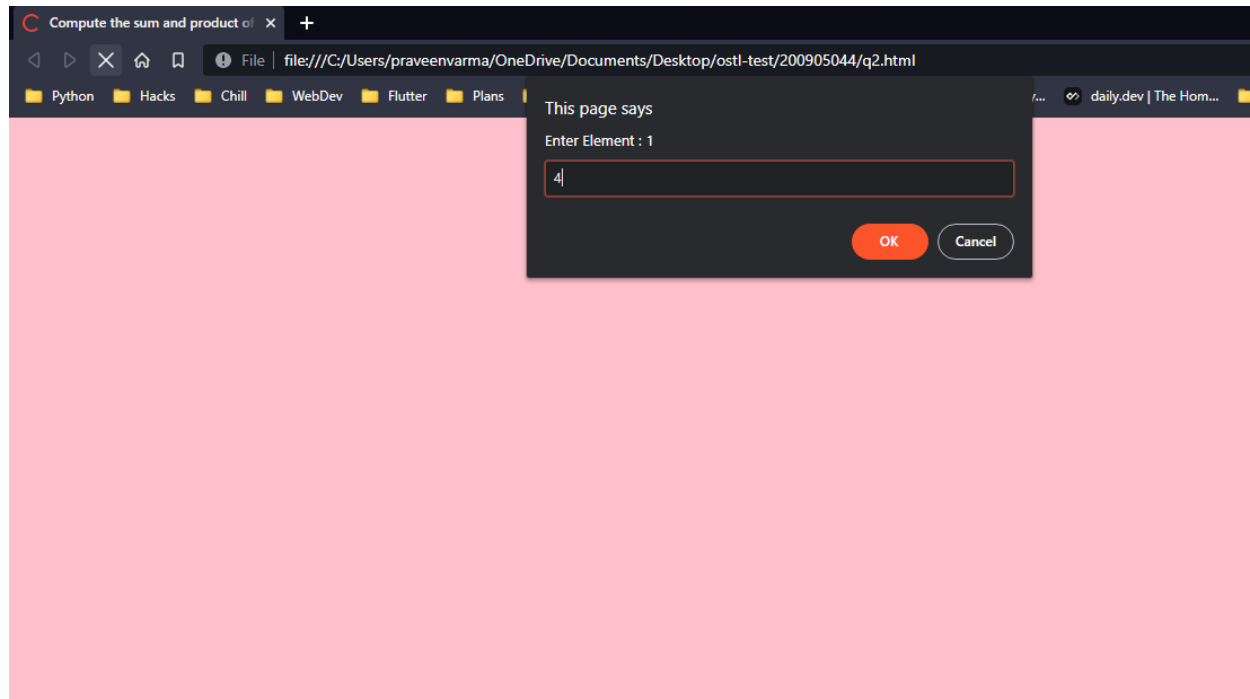


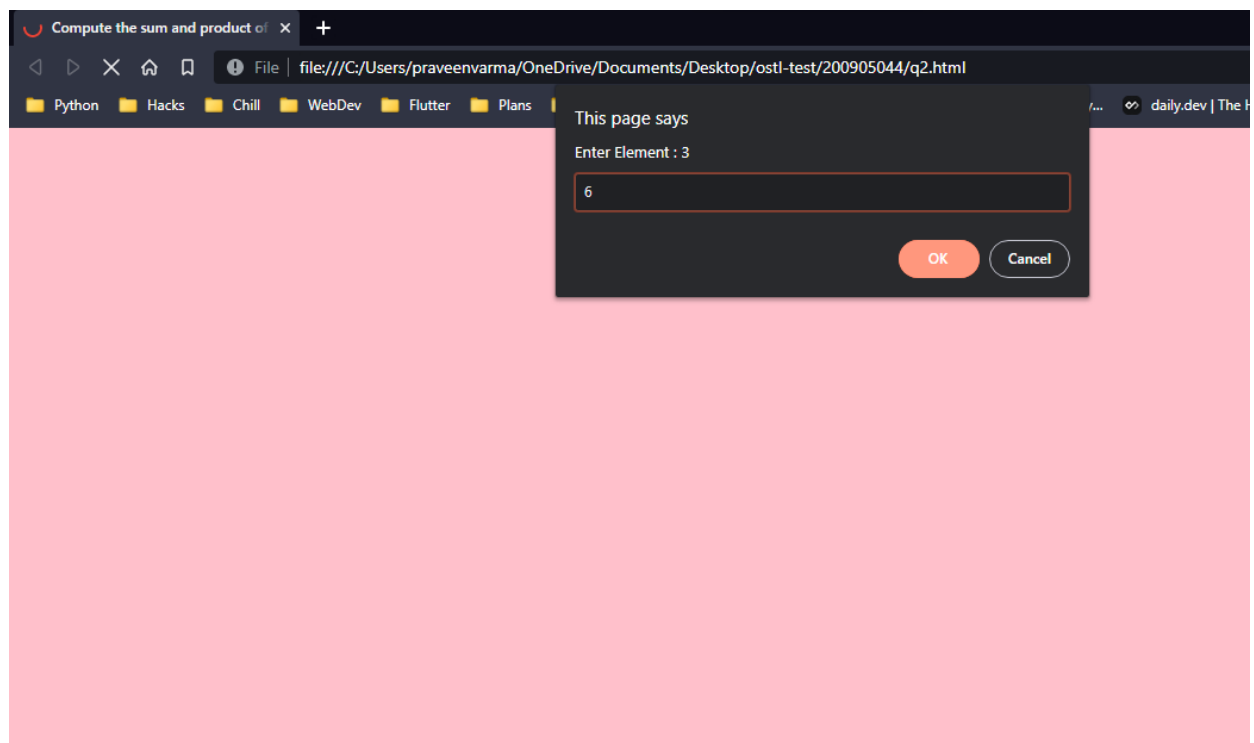
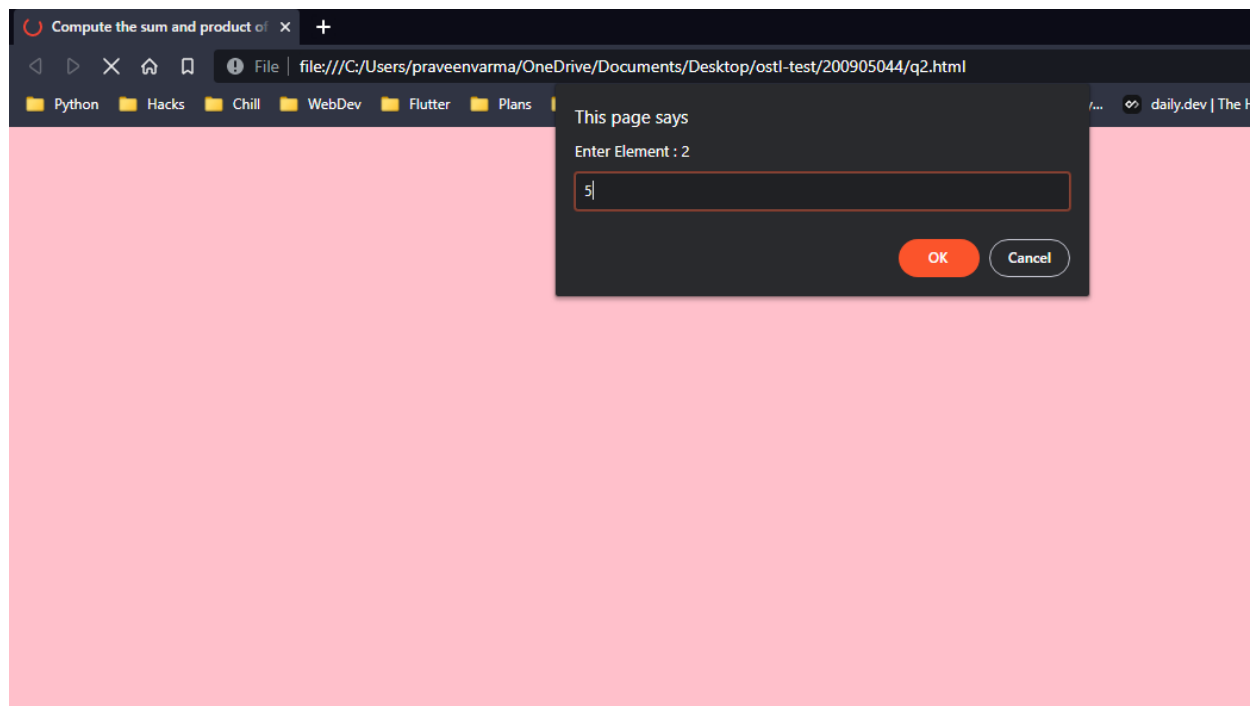
2. Write a JavaScript program to compute the sum and product of an array of integers. Take the array elements from user. (Use alert command)

Solution:-

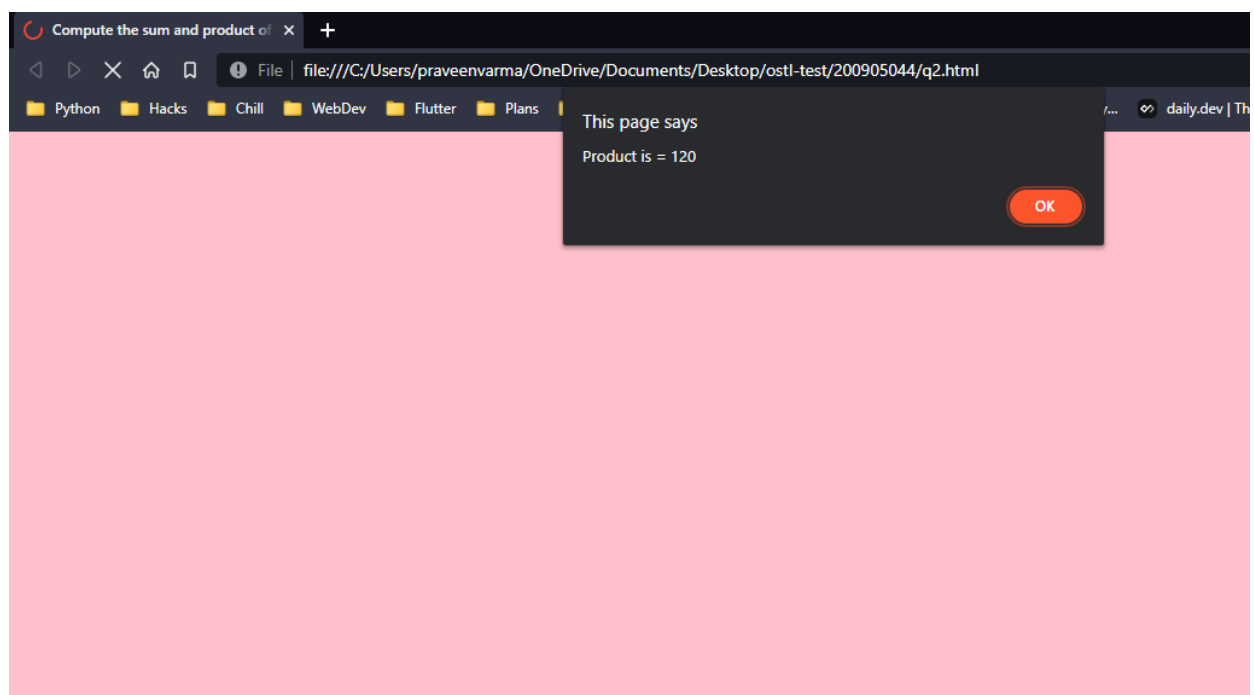
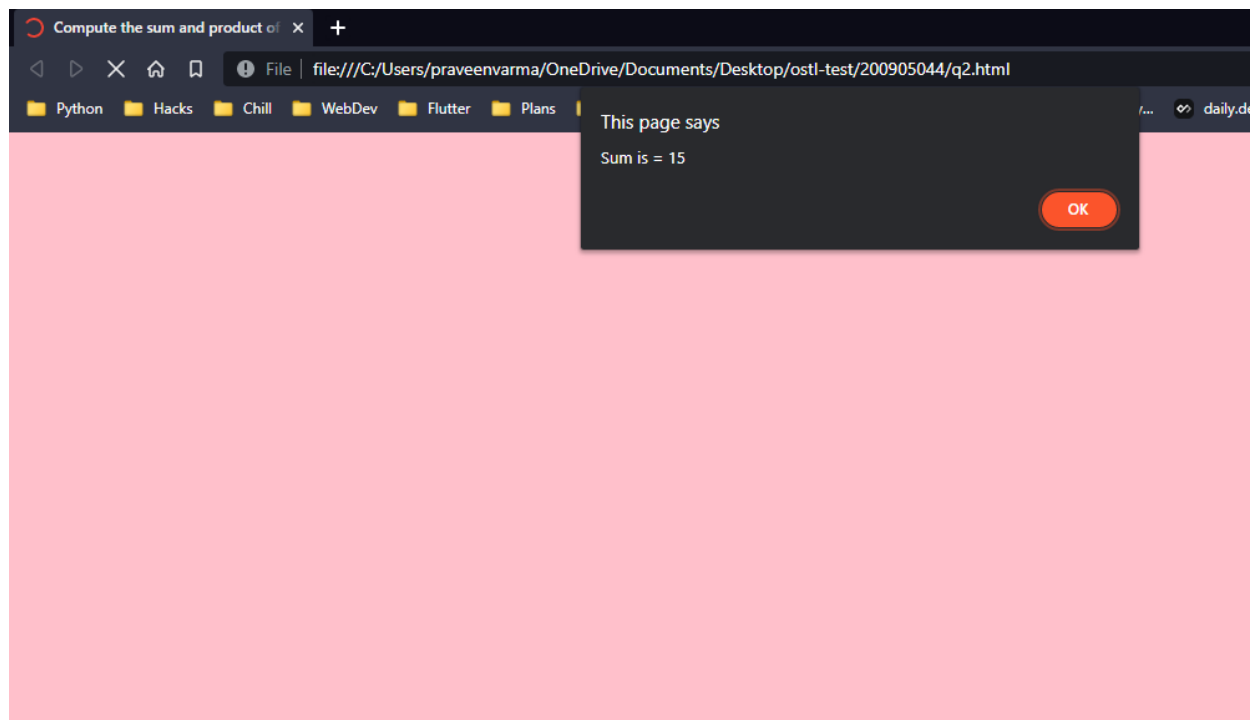
```
<!DOCTYPE html>
<html>
<head>
<title>Compute the sum and product of an array of integers</title>
</head>
<body style = "background-color: pink">
<script>
var inputArray = [];
var sum =0;
var mul=1;
var size = prompt('Enter number of elements : '); //Maximum Array size
for(var i=0; i<size; i++)
{
    inputArray[i] = prompt('Enter Element : ' + (i+1));
    sum = sum + parseInt(inputArray[i]);
    mul = mul*inputArray[i];
}
alert("Sum is = "+(sum));
alert("Product is = "+mul);
</script>
</body>
</html>
```







Final Results:-

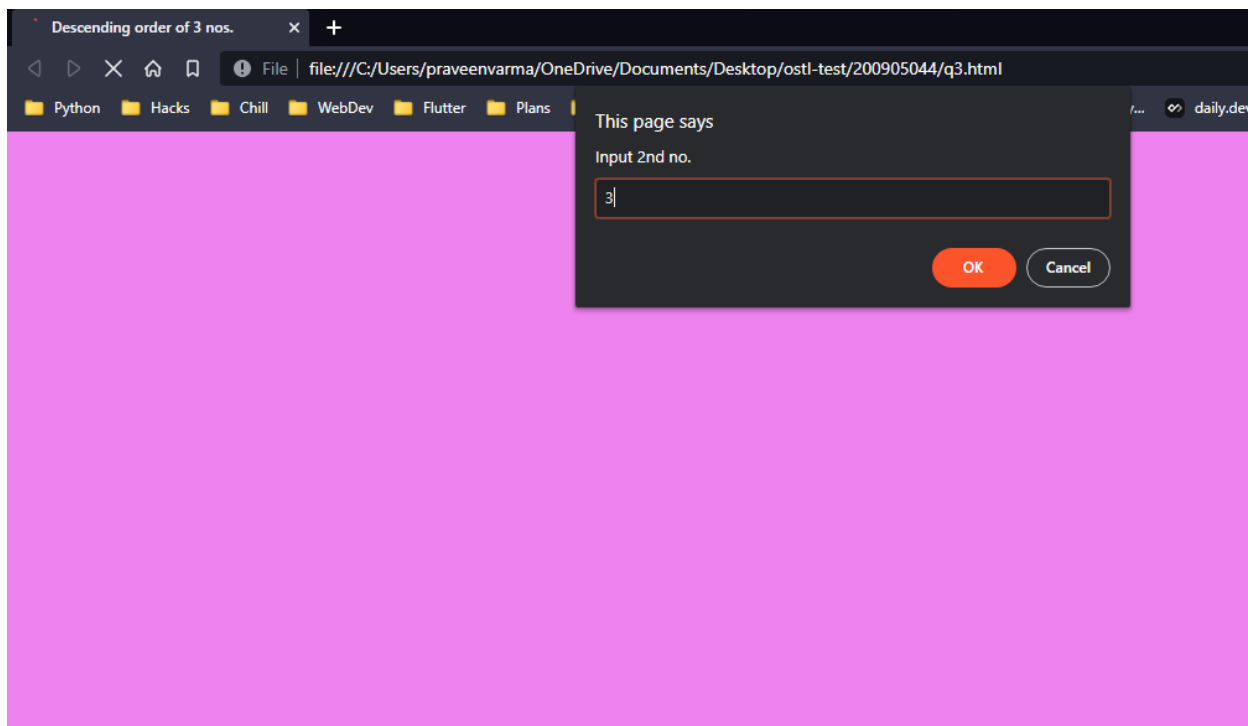
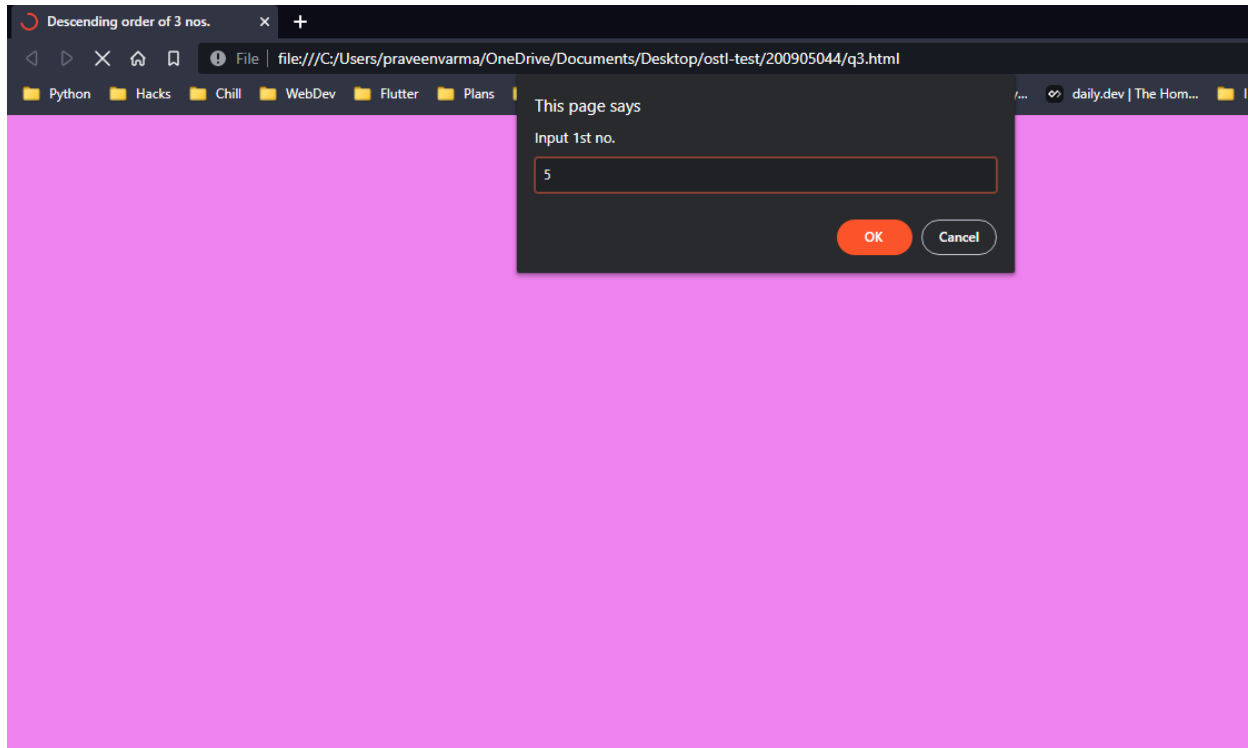


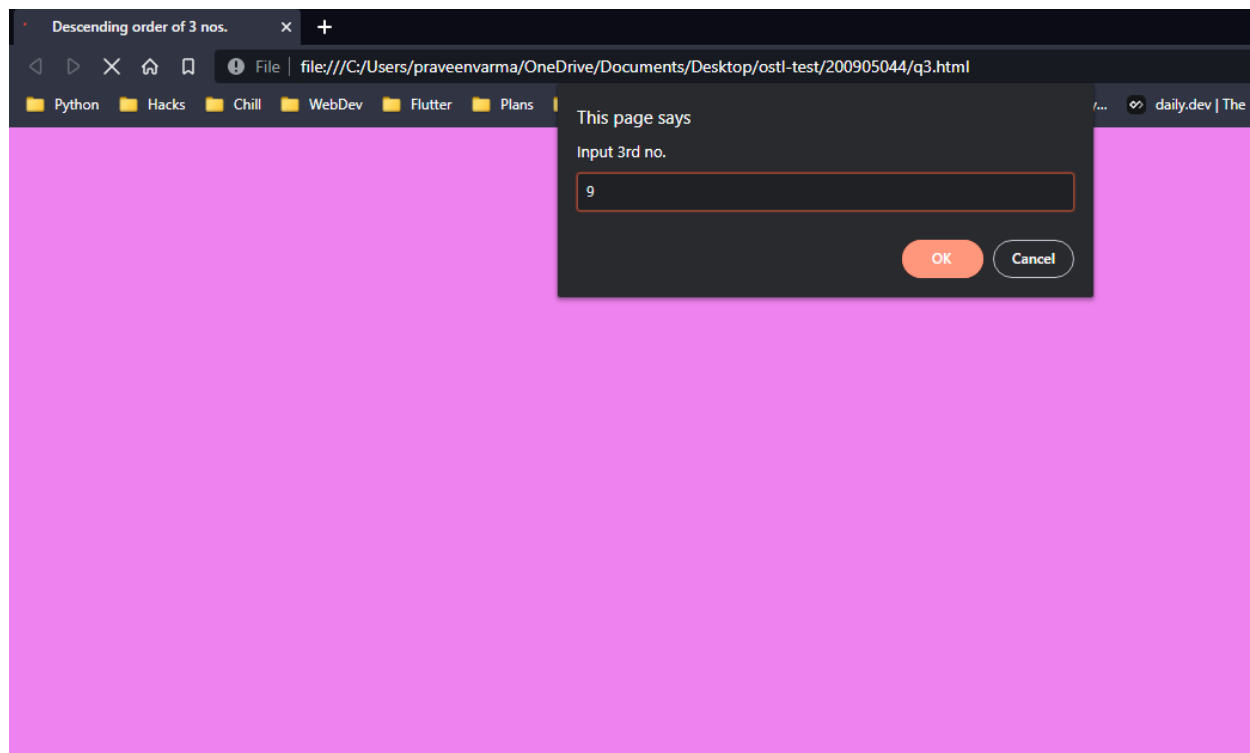
3. Write a JavaScript conditional statement to sort any three numbers. Display an alert box to show the result.

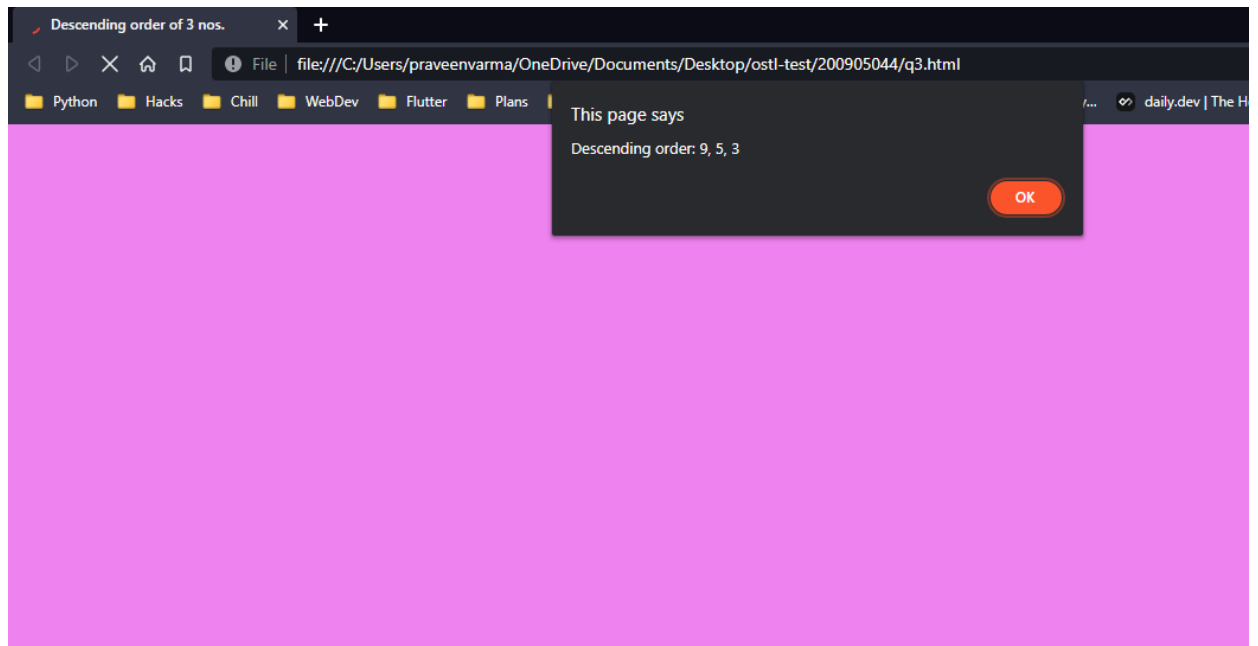
Solution:-

```
<!DOCTYPE html>
<html>
<head>
<title>Descending order of 3 nos.</title>
</head>
<body style="background-color: violet">
<script>
    var x=prompt('Input 1st no. ');
    var y=prompt('Input 2nd no. ');
    var z=prompt('Input 3rd no. ');
    if (x>y && x>z)
    {
        if (y>z)
        {
            alert("Descending order: " + x + ", " + y + ", " + z);
        }
        else
        {
            alert("Descending order: " + x + ", " + z + ", " + y);
        }
    }
    else if (y>x && y >z)
    {
        if (x>z)
        {
            alert("Descending order: " + y + ", " + x + ", " + z);
        }
        else
        {
            alert("Descending order: " + y + ", " + z + ", " + x);
        }
    }
    else if (z>x && z>y)
    {
        if (x>y)
        {
            alert("Descending order: " + z + ", " + x + ", " + y);
        }
        else
        {
            alert("Descending order: " + z + ", " + y + ", " + x);
        }
    }
}
```

```
}  
</script>  
</body>  
</html>
```



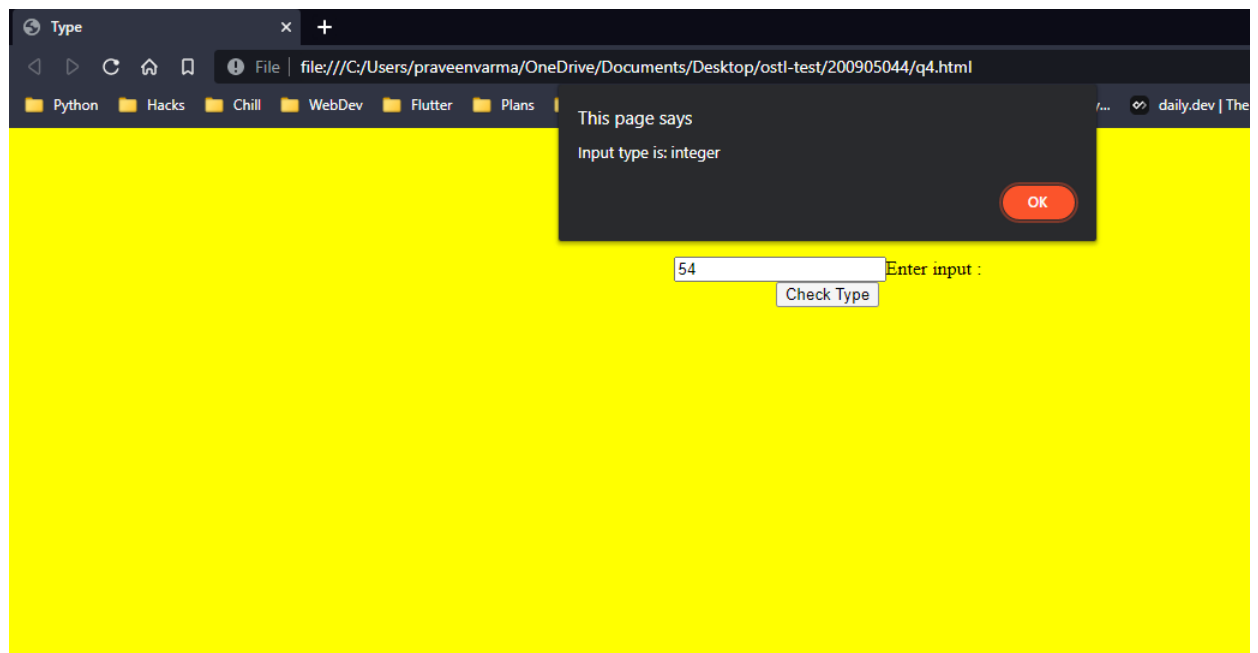
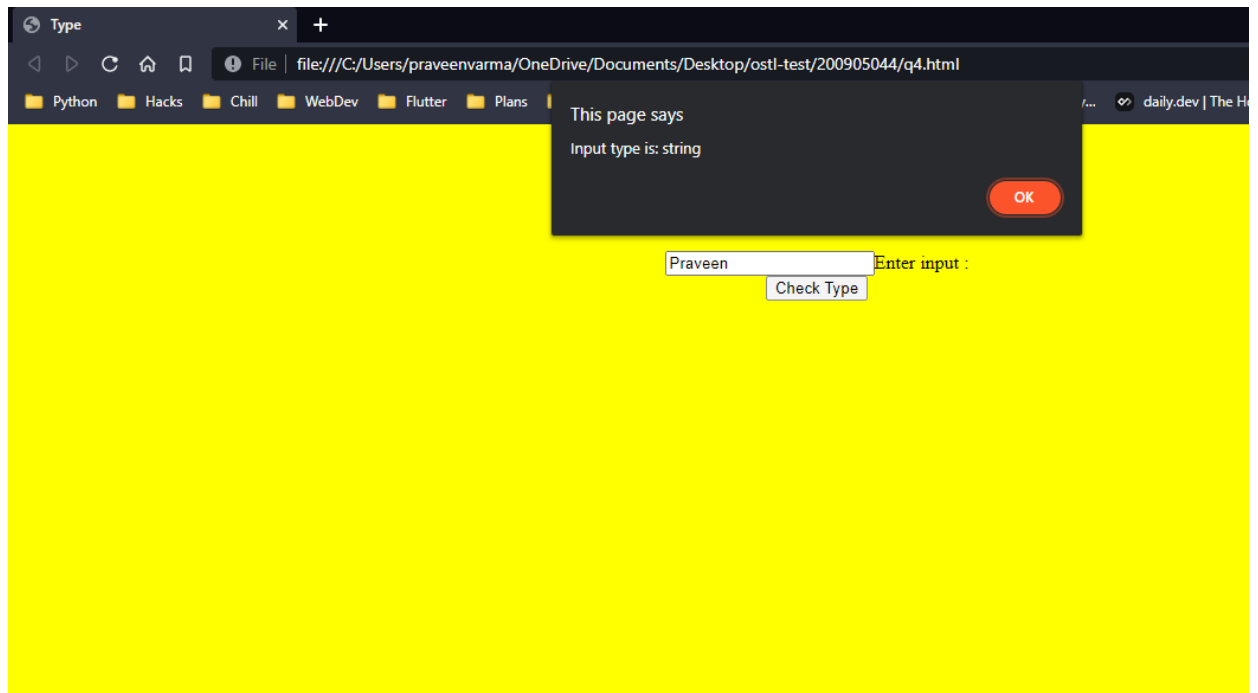


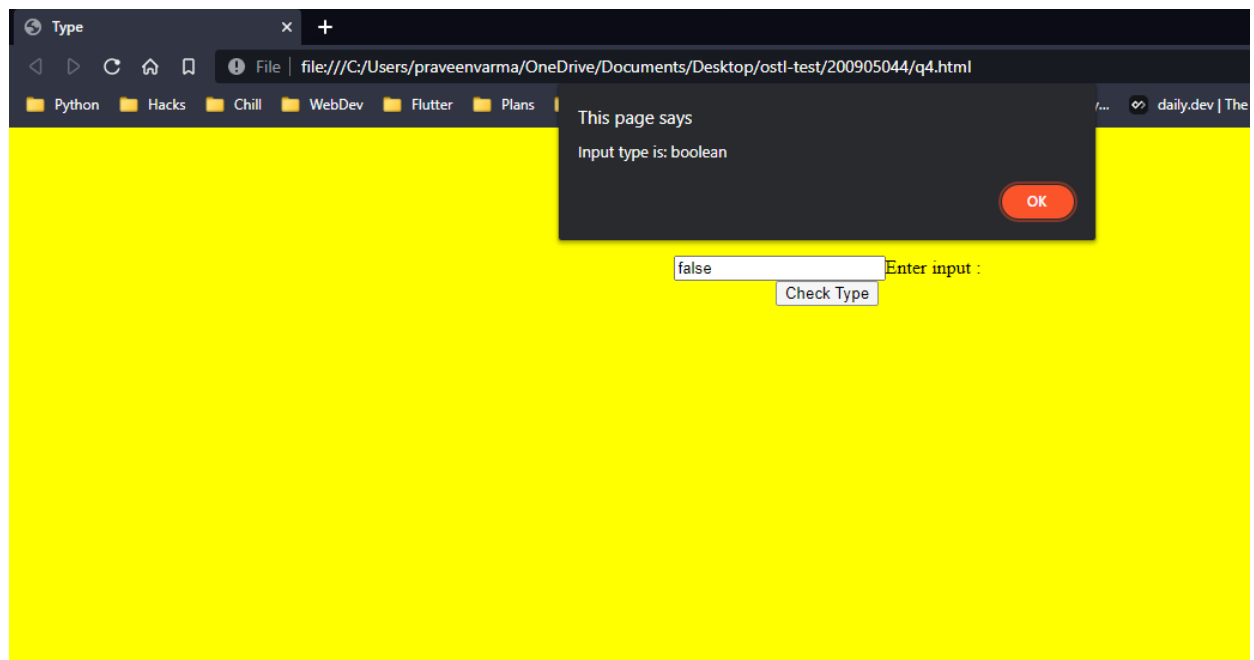


4. Write a java script program to take some input from the user [string, integer and Boolean]. Based on the input, display the type of the input in the 'text box'.

Solution:-

```
<!DOCTYPE html>
<html>
<head>
<meta charset=utf-8 />
<title>Type</title>
</head>
<body style="text-align: center;background-color: yellow;">
<h2>Input Type!</h2>
<h4>Check the type of your input(string/integer/boolean):</h4>
<input id="text1">Enter input : </input>
<br>
<input type="button" id="button1" value="Check Type" onclick="add_element();"></input>
<script>
    var a,b,c;
    function add_element()
    {
        a=document.getElementById("text1").value;
        c=parseInt(a);
        if(a=="true" || a=="false" || a=="True" || a=="False")
            b="boolean";
        else if(Number.isInteger(c))
            b="integer";
        else
            b="string";
        alert("Input type is: "+ b);
        document.getElementById("text1").value = "";
    }
</script>
</body>
</html>
```





5. Write the HTML5 program to draw a "smiling face" picture using the canvas tag.

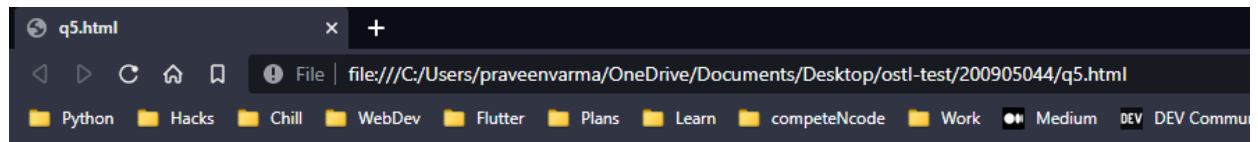
Solution:-

```
<!DOCTYPE html>
<html>
<body>

<canvas id="myCanvas" width="200" height="150" style="border:1px solid #d3d3d3;">
Your browser does not support the HTML5 canvas tag.</canvas>

<script>
    var c = document.getElementById("myCanvas");
    var ctx = c.getContext("2d");
    ctx.beginPath();
    ctx.fillStyle = "yellow";
    ctx.arc(100, 75, 50, 0, 2 * Math.PI);
    ctx.fill();
    ctx.beginPath();
    ctx.fillStyle = "black";
    ctx.arc(80, 60, 5, 0, 2 * Math.PI);
    ctx.fill();
    ctx.beginPath();
    ctx.fillStyle = "black";
    ctx.arc(120, 60, 5, 0, 2 * Math.PI);
    ctx.fill();
    ctx.beginPath();
    ctx.arc(100, 80, 25, Math.PI/5, 4 * Math.PI/5);
    ctx.stroke();
</script>

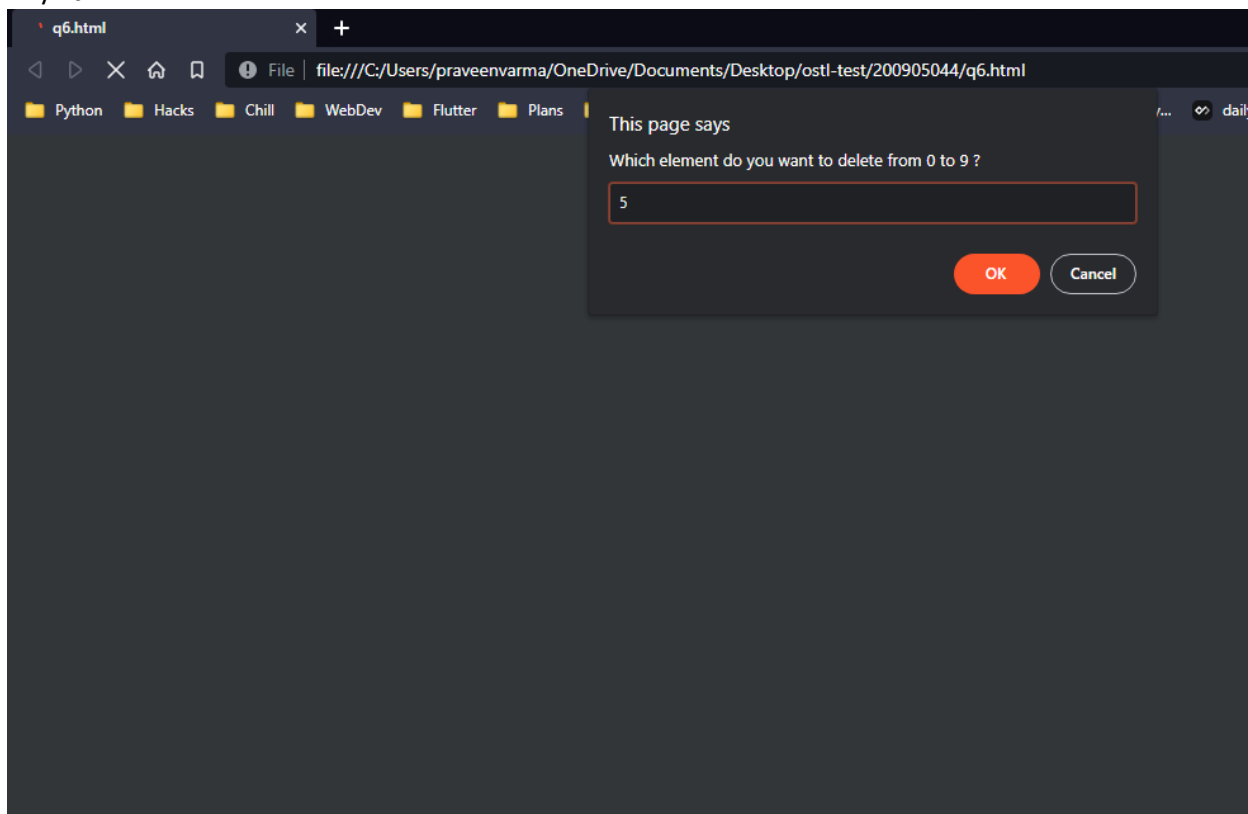
</body>
</html>
```

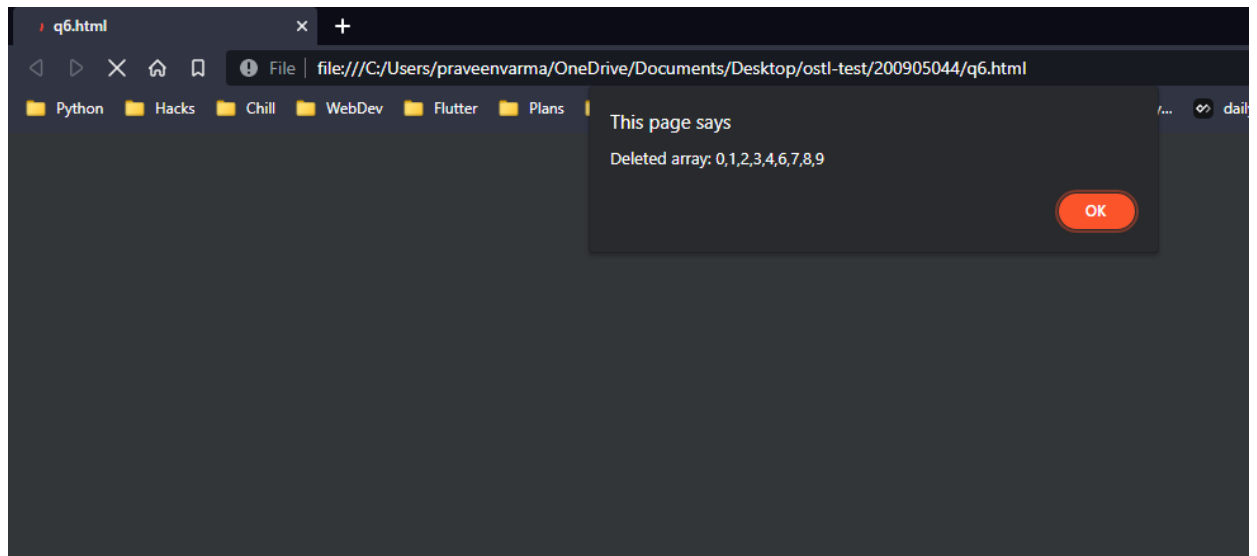


6. Write the JavaScript program to add items into the array and delete items from array using two methods.

Solution:-

```
<!DOCTYPE html>
<html>
<body>
<script>
    var arr = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9];
    var x=prompt('Which element do you want to delete from 0 to 9 ?');
    for( var i = 0; i < arr.length; i++)
    {
        if ( arr[i] === parseInt(x))
        {
            arr.splice(i, 1);
        }
    }
    alert("Deleted array: "+arr);
    var x=prompt('Which element do you want to insert ?');
    arr.push(x);
    alert("Inserted array: "+arr);
</script>
</body>
</html>
```





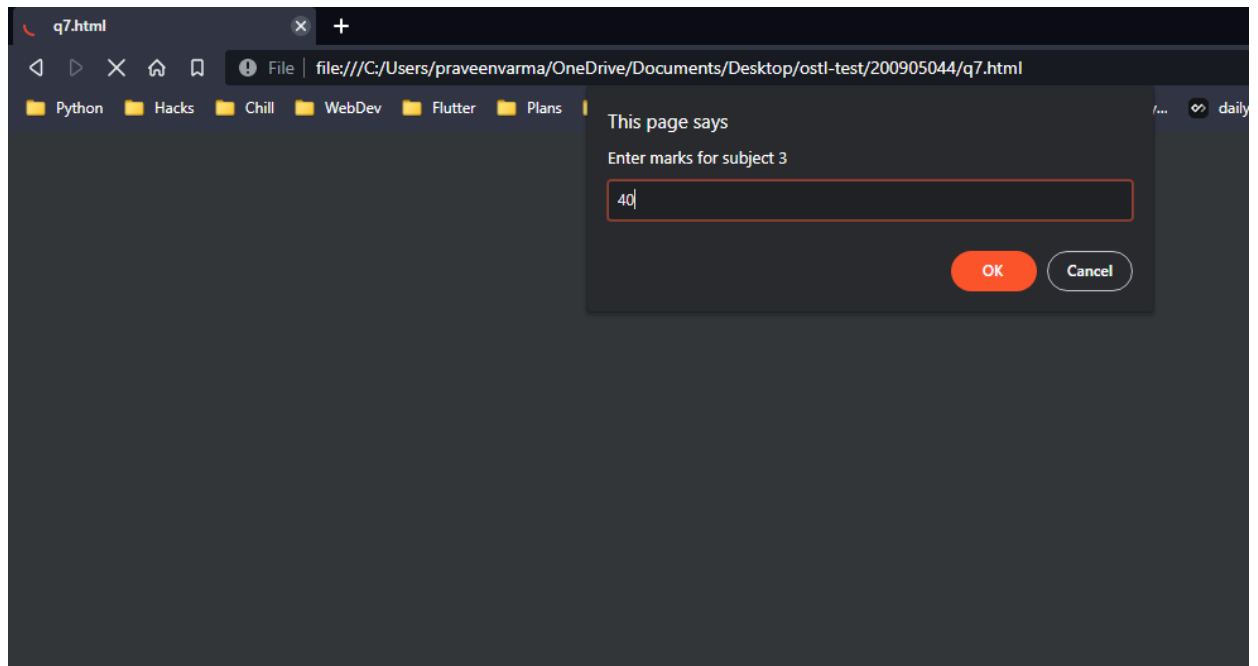
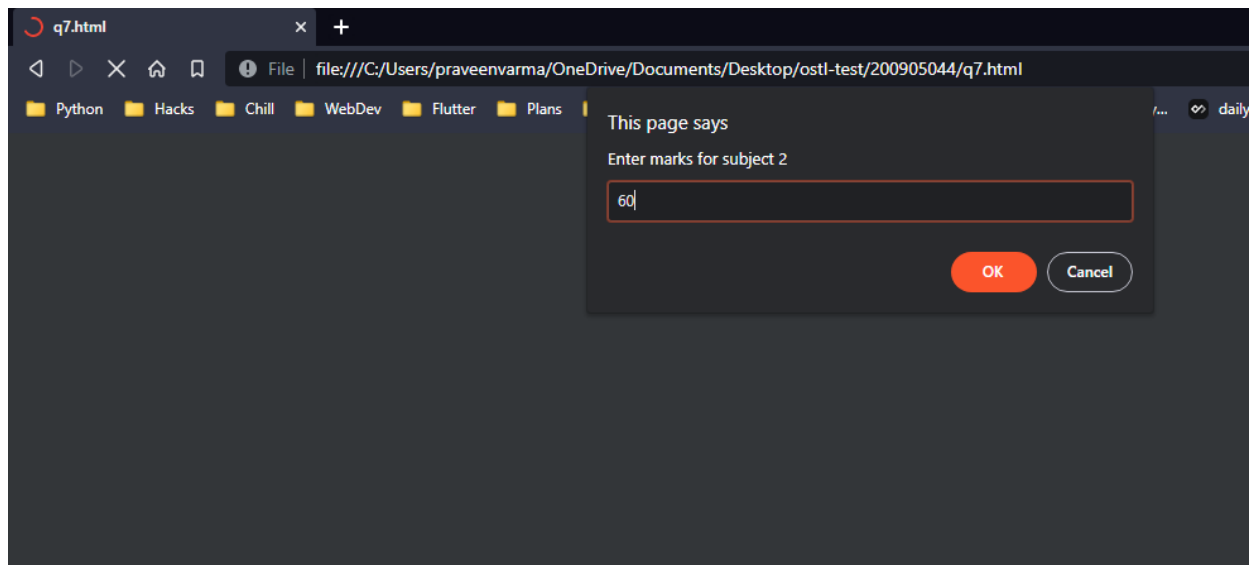
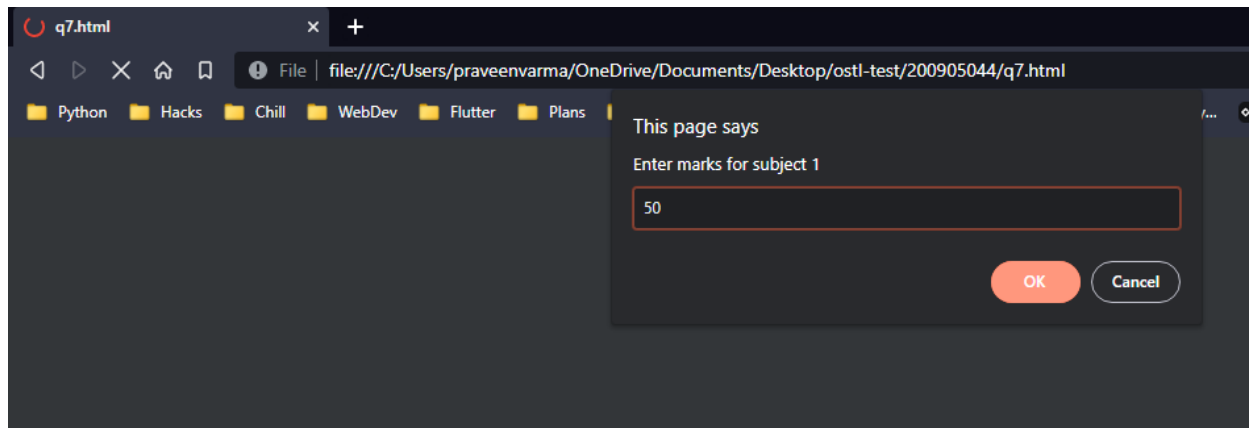
7. Write the java script program to display the grade [A, B,C,D] based on the marks entered by student (take the input into text boxes). Enter the marks of 4 subjects and calculate the average (using button). If the avg>90 then A, avg>80 then B, if avg>70 then C, if avg>60 then D.

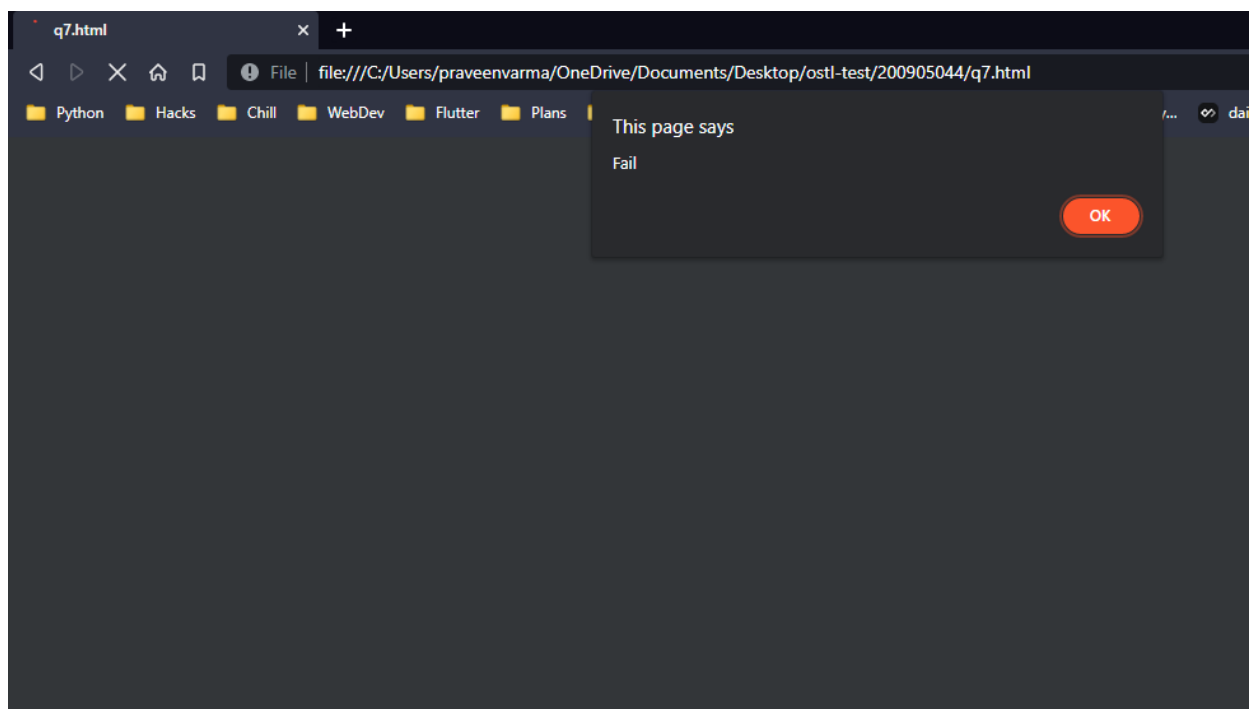
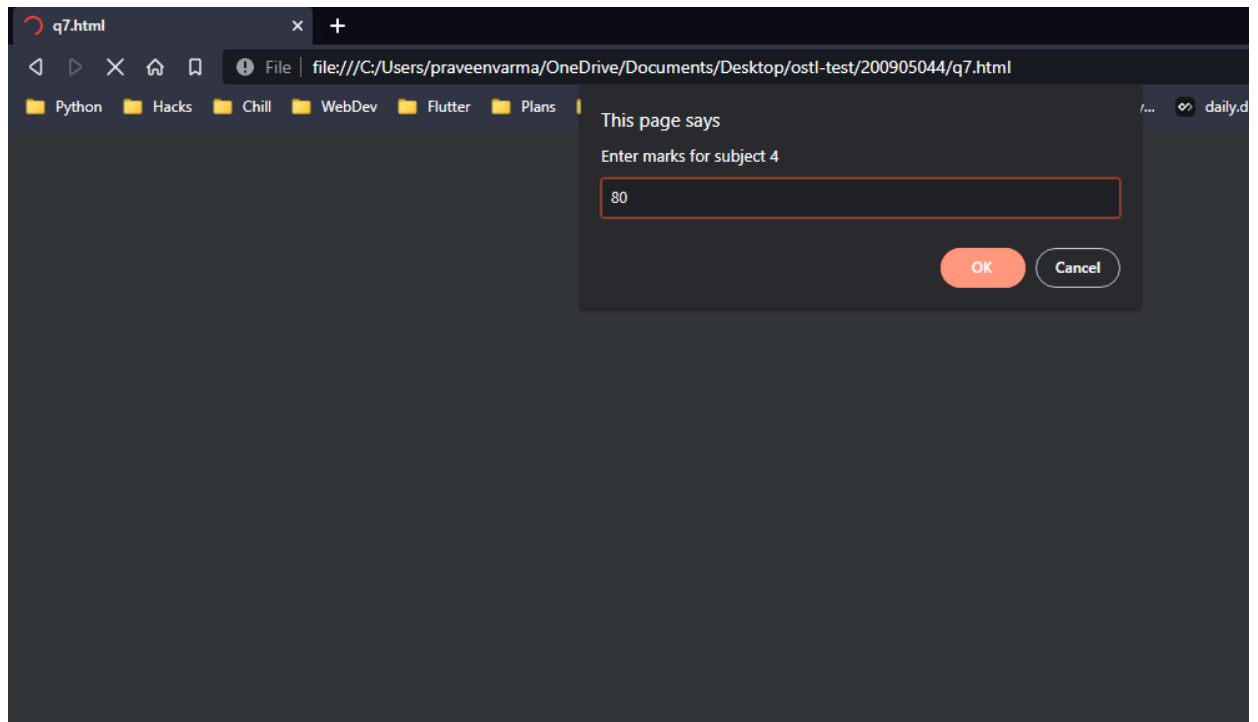
Solution:-

```
<!DOCTYPE html>
<html>
<body>
<script>
    var size=4;
    var avg=0;
    var inputArray = [];
    for(var i=0; i<size; i++)
    {
        inputArray[i] = prompt('Enter marks for subject '+(i+1));
        avg+=parseInt(inputArray[i]);
    }

    avg/=size;

    if(avg>90)
        alert('GRADE A');
    else if(avg>80)
        alert('GRADE B');
    else if(avg>70)
        alert('GRADE C');
    else if(avg>60)
        alert('GRADE D');
    else
        alert('Fail')
</script>
</body>
</html>
```





8. Write the JavaScript program to show the below output.

☒ Red
☐ Green
☐ Blue



Solution:-

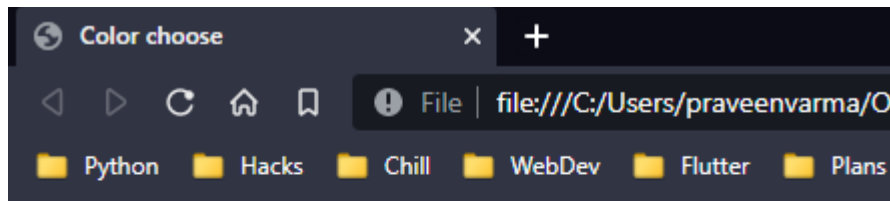
```
<!DOCTYPE html>
<html>
<head>
    <title>Color choose</title>
</head>
<body>
    <form>
        <input type="radio" id="button1" onclick="func1();" name="button1"
value="red">Red</input><br>
        <input type="radio" id="button2" onclick="func2();" name="button2"
value="green">Green</input><br>
        <input type="radio" id="button3" onclick="func3();" name="button3"
value="blue">Blue</input><br>
    </form>
    <canvas id="myCanvas" width="300" height="300"></canvas>
    <script>

    function func1()
    {
        var canvas = document.getElementById("myCanvas");
        var ctx = canvas.getContext("2d");
        ctx.fillStyle = "red";
        ctx.fillRect(55,50,100,150);
    }

    function func2()
    {
        var canvas = document.getElementById("myCanvas");
        var ctx = canvas.getContext("2d");
        ctx.fillStyle = "green";
```

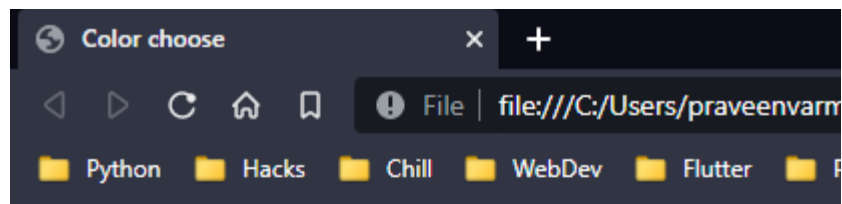
```
        ctx.fillRect(55,50,100,150);
    }

    function func3()
    {
        var canvas = document.getElementById("myCanvas");
        var ctx = canvas.getContext("2d");
        ctx.fillStyle = "blue";
        ctx.fillRect(55,50,100,150);
    }
</script>
</body>
```



- ☐ Red
- ☒ Green
- ☐ Blue





- ☒ Red
- ☒ Green
- ☒ Blue



9. Write the HTML5 program to display following with validation to each field.

Name [take only capital letters]:

Password[show stars]:

Phone Number[10 digits only]:

Solution:-

```
<!DOCTYPE html>
<html>
<head>
  <title></title>
</head>
<body>

<p>Name:<input type="text" id="fname"/></p>
<p>Password:<input type="password" id="password"/></p>
<p>Phone Number:<input type="number" id="phone"/></p>

<button type="button" onclick="myFunction()">Log In</button>

<script>
function myFunction()
{
    var i;

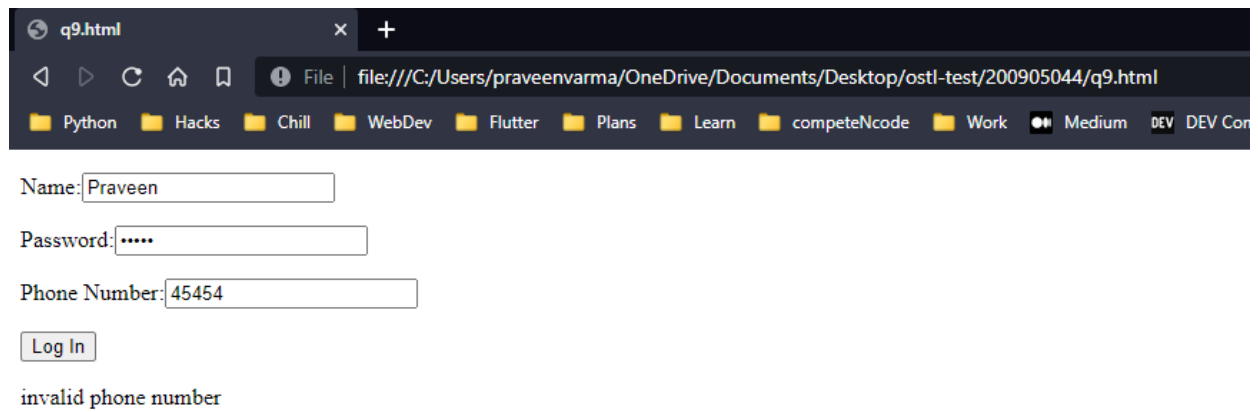
    var name = document.getElementById("fname").value;
    var password = document.getElementById("password").value;
    var phone = document.getElementById("phone").value;

    if(phone.length==10)
    {
        document.getElementById("demo").innerHTML="valid phone number";
    }

    else
    {
        document.getElementById("demo").innerHTML="invalid phone number";
    }
}
</script>
<p id="demo"></p>
```



```
</body>
</html>
```



q9.html

File | file:///C:/Users/praveenvarma/OneDrive/Documents/Desktop/ostl-test/200905044/q9.html

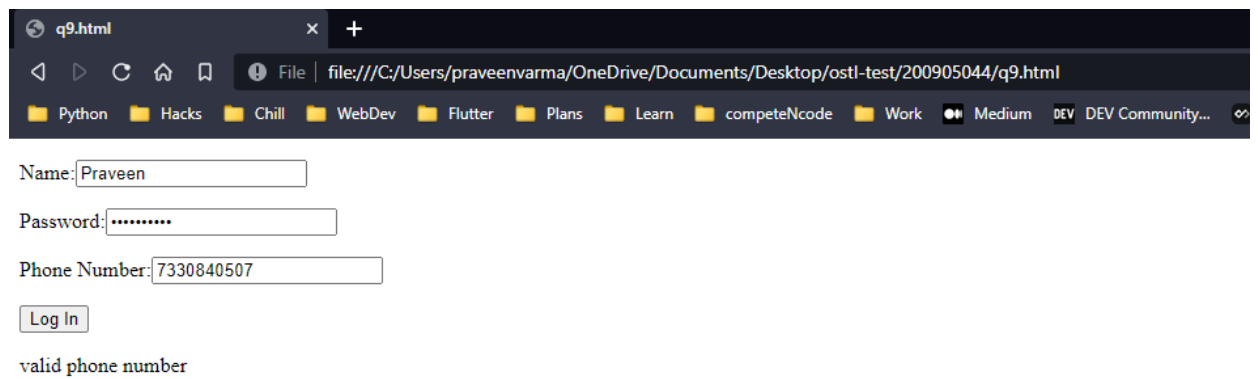
Python Hacks Chill WebDev Flutter Plans Learn competeNcode Work Medium DEV DEV Cor

Name:

Password:

Phone Number:

invalid phone number



q9.html

File | file:///C:/Users/praveenvarma/OneDrive/Documents/Desktop/ostl-test/200905044/q9.html

Python Hacks Chill WebDev Flutter Plans Learn competeNcode Work Medium DEV DEV Community...

Name:

Password:

Phone Number:

valid phone number

10. Write a JavaScript program to perform an online quiz.

Solution:-

```
<!DOCTYPE html>
<html>
<head>
    <title>Quiz</title>
</head>
<body style="text-align: center;background-color: lightpink">

<h1>QUIZ</h1>
Capital of India <input type="text" id="Text1" >
<button id ="But1" onclick="myFunction1()">Try it</button>
<br></br>
Capital of Bangladesh <input type="text" id="Text2" >
<button id ="But2" onclick="myFunction2()">Try it</button>
<br></br>
Largest Country in the World <input type="text" id="Text3" >
<button id ="But3" onclick="myFunction3()">Try it</button>
<br></br>
<button id ="But4" onclick="myFunction4()">Total Score</button>
<script>

    var string;
    var count=0;

    function myFunction1()
    {
        var string1="New Delhi";
        string = document.getElementById("Text1").value;
        if(string1==string)
        {
            count=count+1;
            alert('Correct Answer');
            var elem = document.getElementById("But1");
            elem.parentNode.removeChild(elem);
        }

        else
        {

            alert('Wrong Answer');
            var elem = document.getElementById("But1");
            elem.parentNode.removeChild(elem);
        }
    }
}
```

```

    }
}
function myFunction2()
{
    var string1="Dhaka";
    string = document.getElementById("Text2").value;

    if(string1==string)
    {
        count=count+1;
        alert('Correct Answer');
        var elem = document.getElementById("But2");
        elem.parentNode.removeChild(elem);

    }

    else
    {
        alert('Wrong Answer');
        var elem = document.getElementById("But2");
        elem.parentNode.removeChild(elem);

    }
}

function myFunction3()
{
    var string1="Russia";
    string = document.getElementById("Text3").value;

    if(string1==string)
    {
        count=count+1;
        alert('Correct Answer');
        var elem = document.getElementById("But3");
        elem.parentNode.removeChild(elem);

    }

    else
    {
        alert('Wrong Answer');
        var elem = document.getElementById("But3");
        elem.parentNode.removeChild(elem);

    }
}

```

```

function myFunction4()
{
    var string1="New Delhi";
    string = document.getElementById("Text1").value;

    if(string1==string)
    {
        count=count+1;
    }

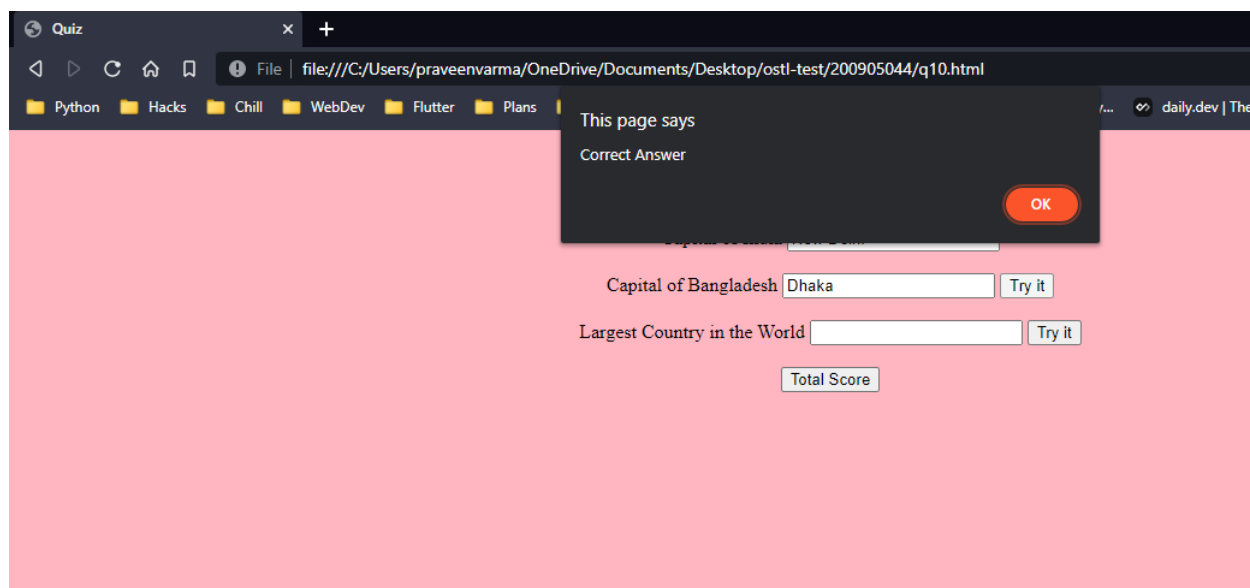
    string1="Dhaka";
    string = document.getElementById("Text2").value;

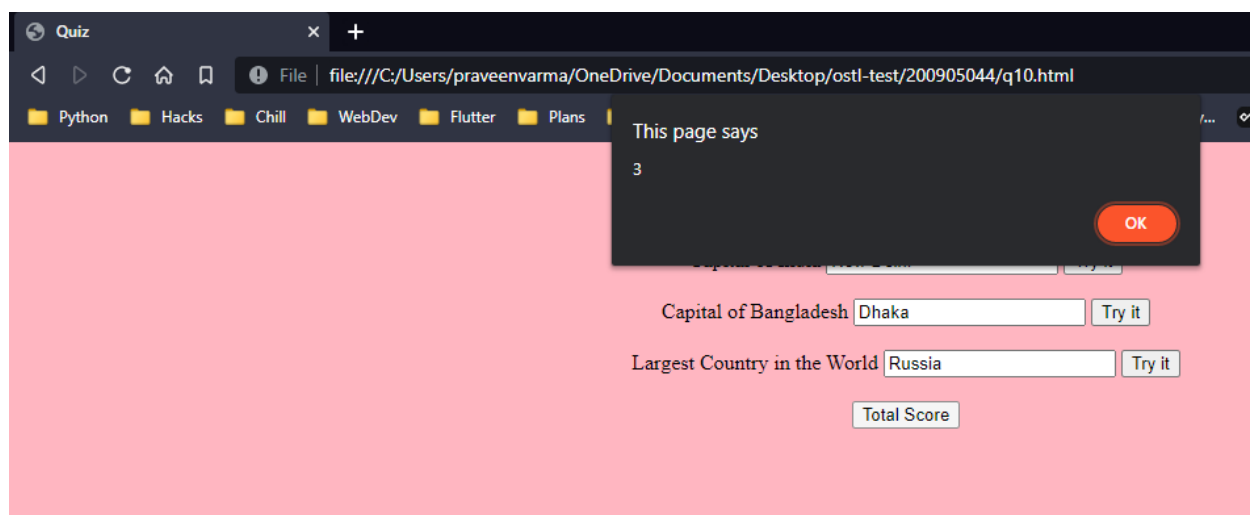
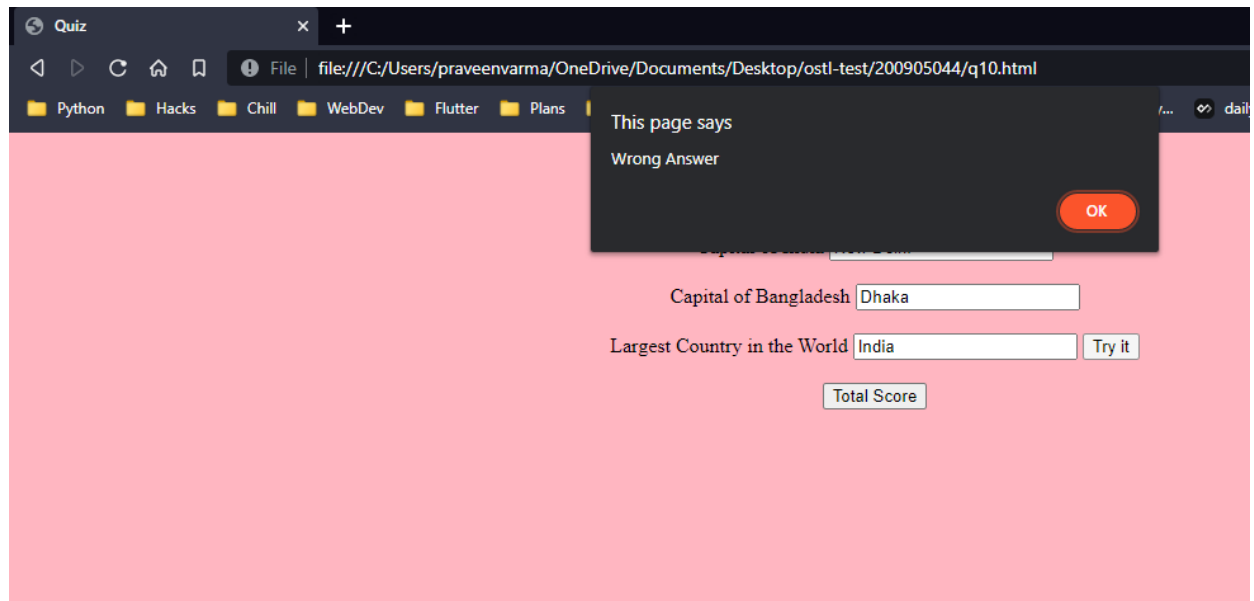
    if(string1==string)
    {
        count=count+1;
    }

    string1="Russia";
    string = document.getElementById("Text3").value;

    if(string1==string)
    {
        count=count+1;
    }
    alert(count);
}
</script>
</body>
</html>

```





THANK YOU!