***Program-4:***

**Develop and demonstrate a HTML5 file that includes JavaScript script that uses functions for the following problems:**

**a. Parameter: A string | Output: The numbers of vowels in the string**

**b. Parameter: A number | Output: The number with its digits in the reverse order and Product of both number and its Reverse**

1. **HTML CODE:**

<!DOCTYPE html>

<html>

<head>

<title>Challenge-4</title>

</head>

<body>

<script>

var str = prompt("Enter the Input", "");

if (!(isNaN(str)))

{

var num, rev = 0, remainder;

num = parseInt(str);

while (num != 0) {

remainder = num % 10;

num = parseInt(num / 10);

rev = rev \* 10 + remainder;

}

const product = str \* rev;

alert("Reverse of " + str + " is " + rev + " and the product is " + product);

}

else {

str = str.toUpperCase();

function vowels(string) {

var vowels = 'AEIOUaeiou';

var count = 0;

for (i = 0; i < string.length; i++) {

if (vowels.indexOf(string[i]) !== -1) {

count += 1;

}

}

return count;

}

n = vowels(str)

alert("The given string " + str + " has " + n + " Vowels in it")

}

</script>

</body>

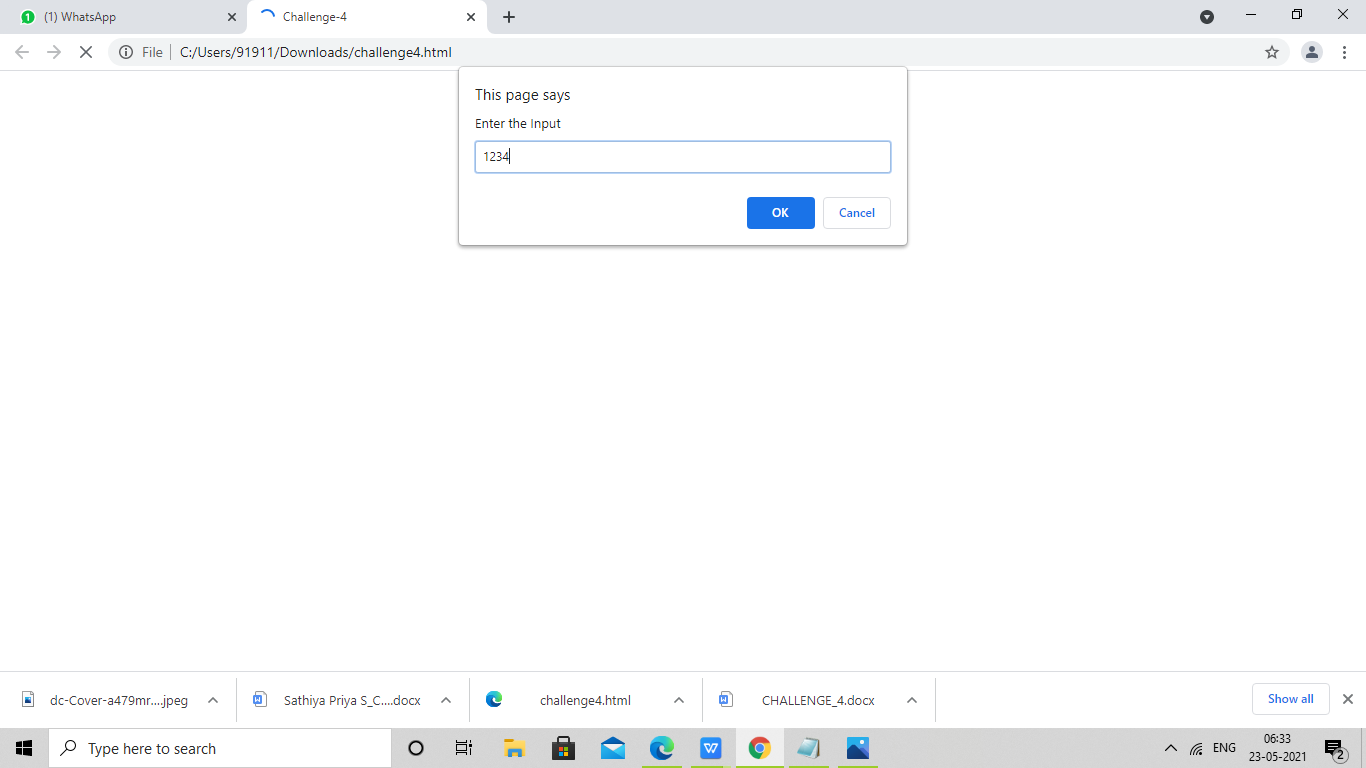
</html>

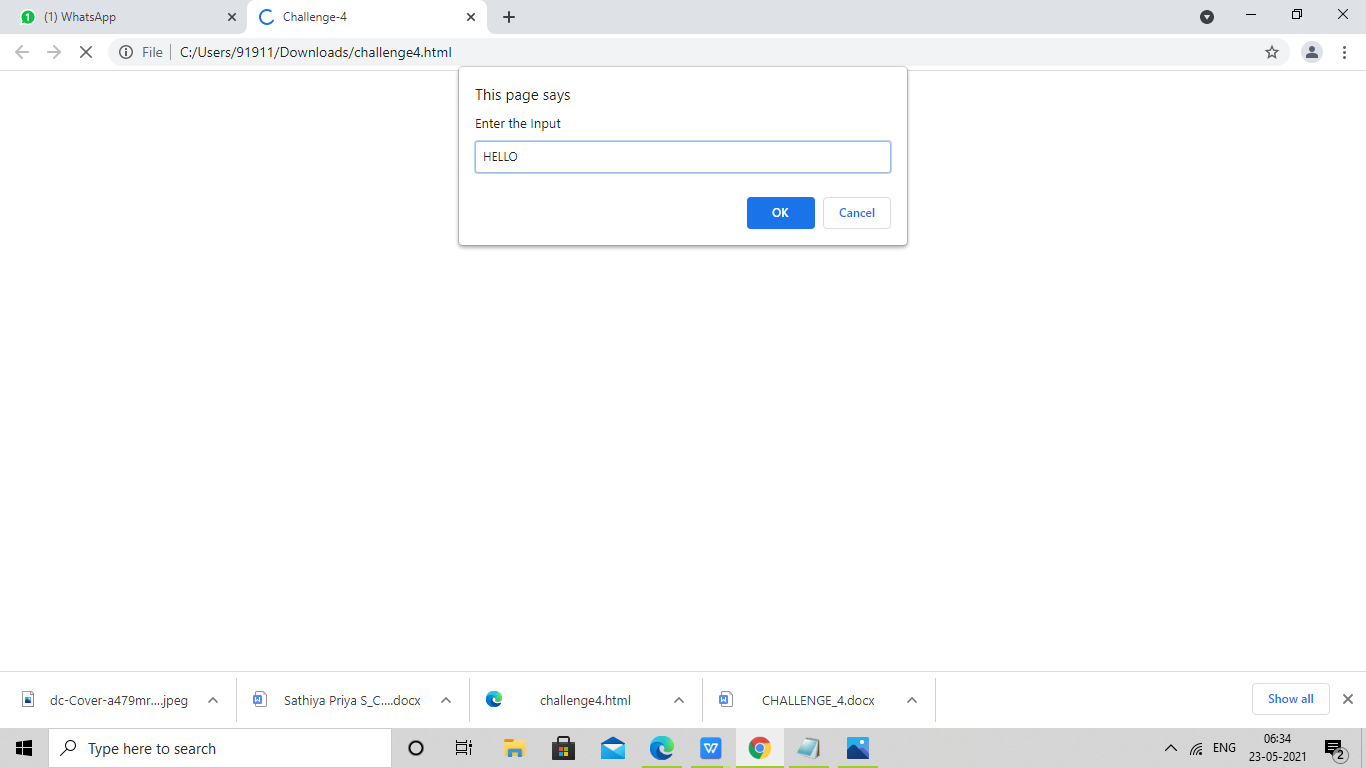
1. **TEST CASES:**

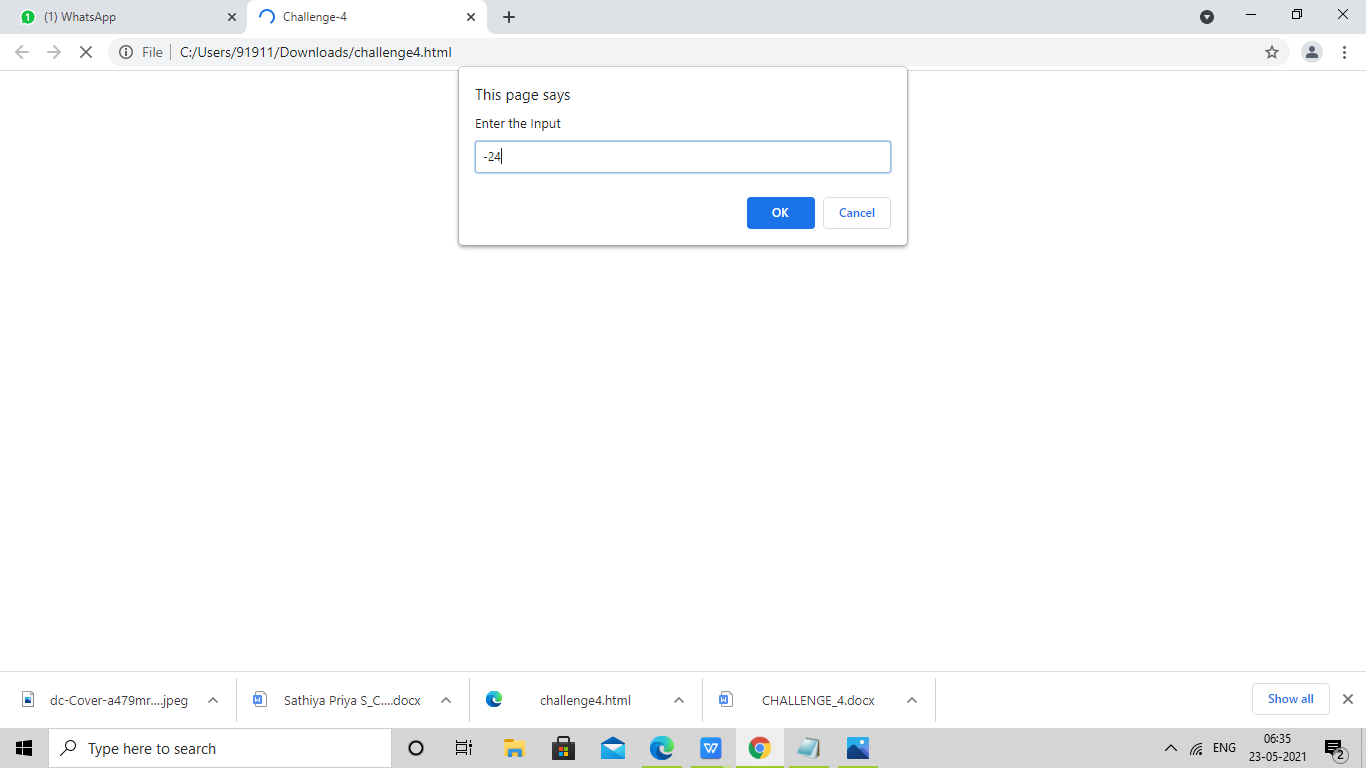
|  |  |  |  |
| --- | --- | --- | --- |
| **Test no** | **Test Case** | **Expected output** | **Actual Output** |
| **1** | a. Integer Value: 1234  b. Text Value:  **HELLO** | a. Reverse of 1234 is 4321 and the product is 5332114  b. The given string HELLO has 2 Vowles in it | a. Reverse of 1234 is 4321 and the product is 5332114  b. The given string HELLO has 2 Vowles in it |
| **2** | a. Negative Integer value: -24  b. Text Value: -WOLF | a. Reverse of -24 is -42 and the product is 1008  b. The given string -WOLF has 1 Vowles in it | a.Reverse of -24 is -42 and the product is 1008  b. The given string -WOLF has 1 Vowles in it |
| **3** | Alpha numerical value: 18IS41 | The given string 18IS41 has 1 Vowles in it | **The given string 18IS41 has 1 Vowles in it** |
| **4** | Non vowel string: BYRLS | The given string BYRLS has 0 Vowles in it | **The given string BYRLS has 0 Vowles in it** |

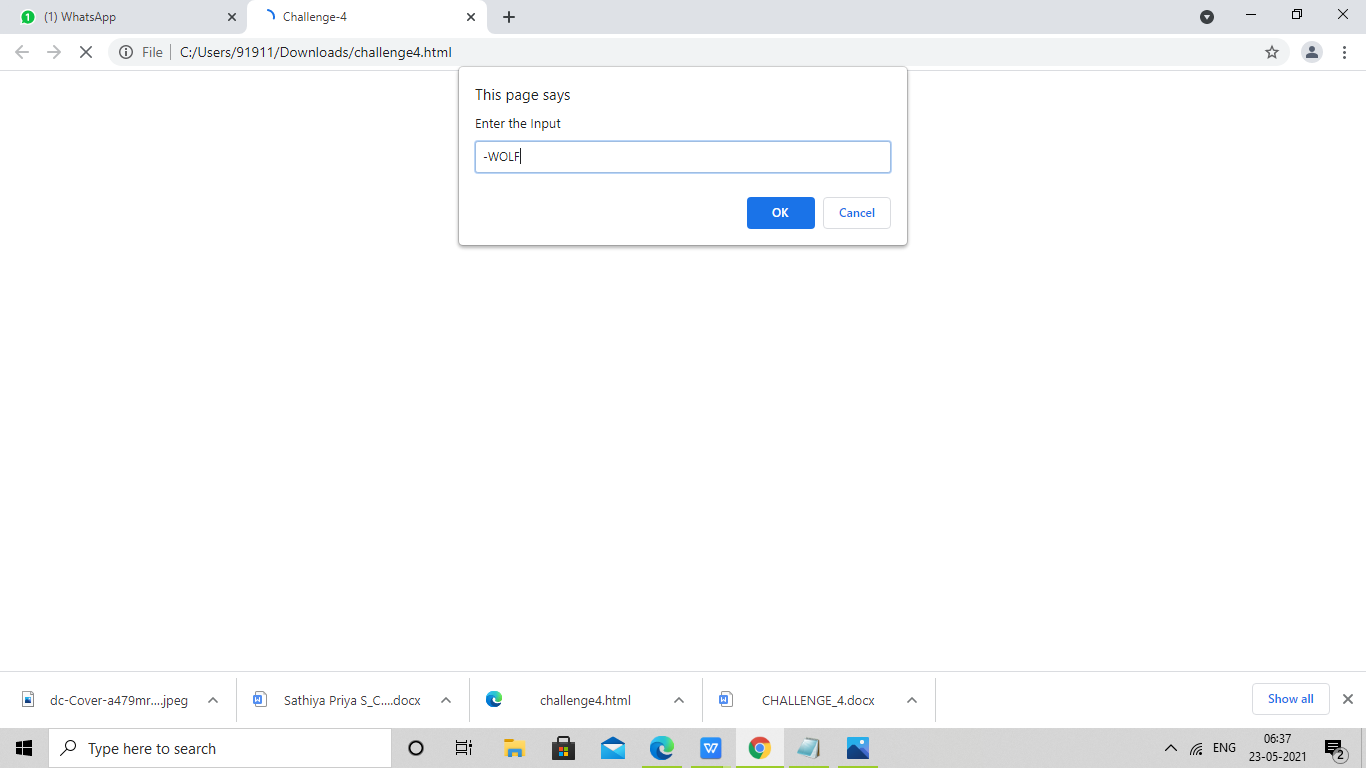
**SNAPSHOTS:**

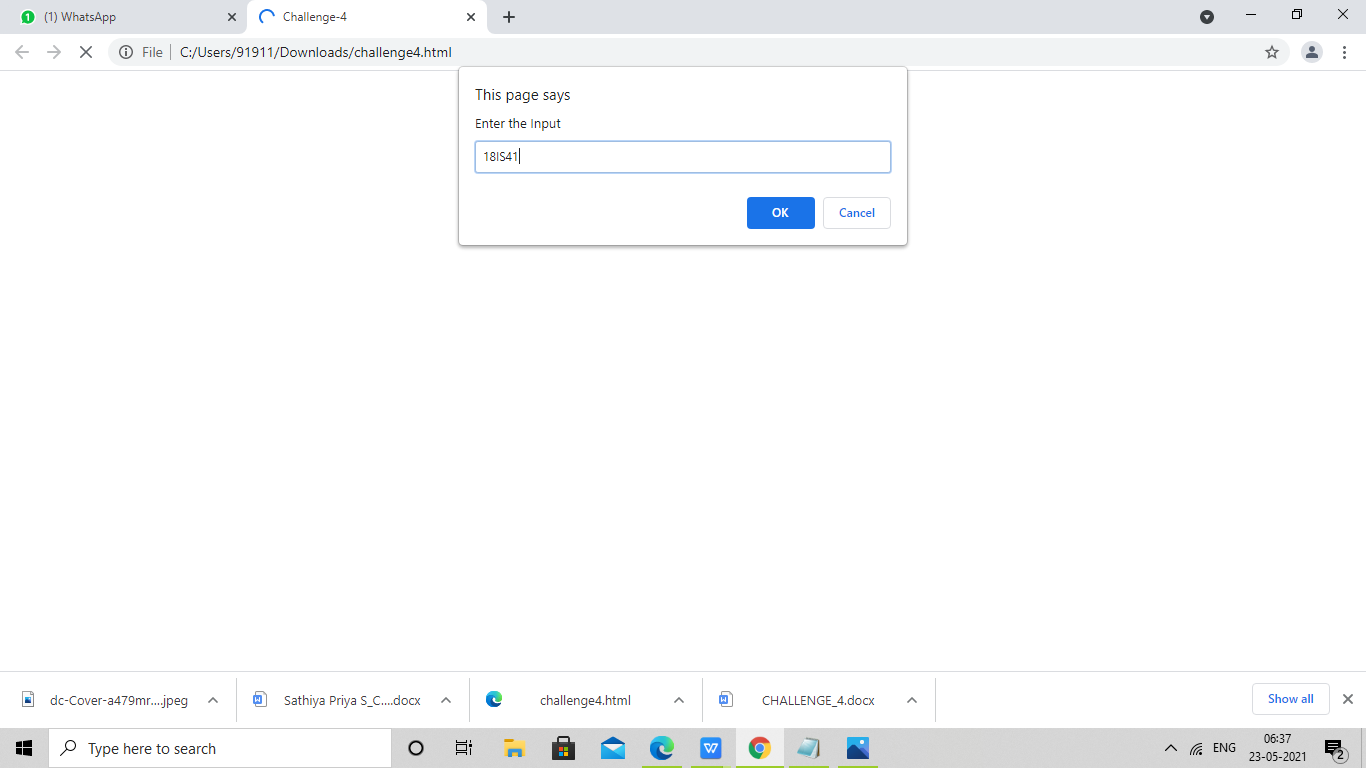
1. **INPUTS**

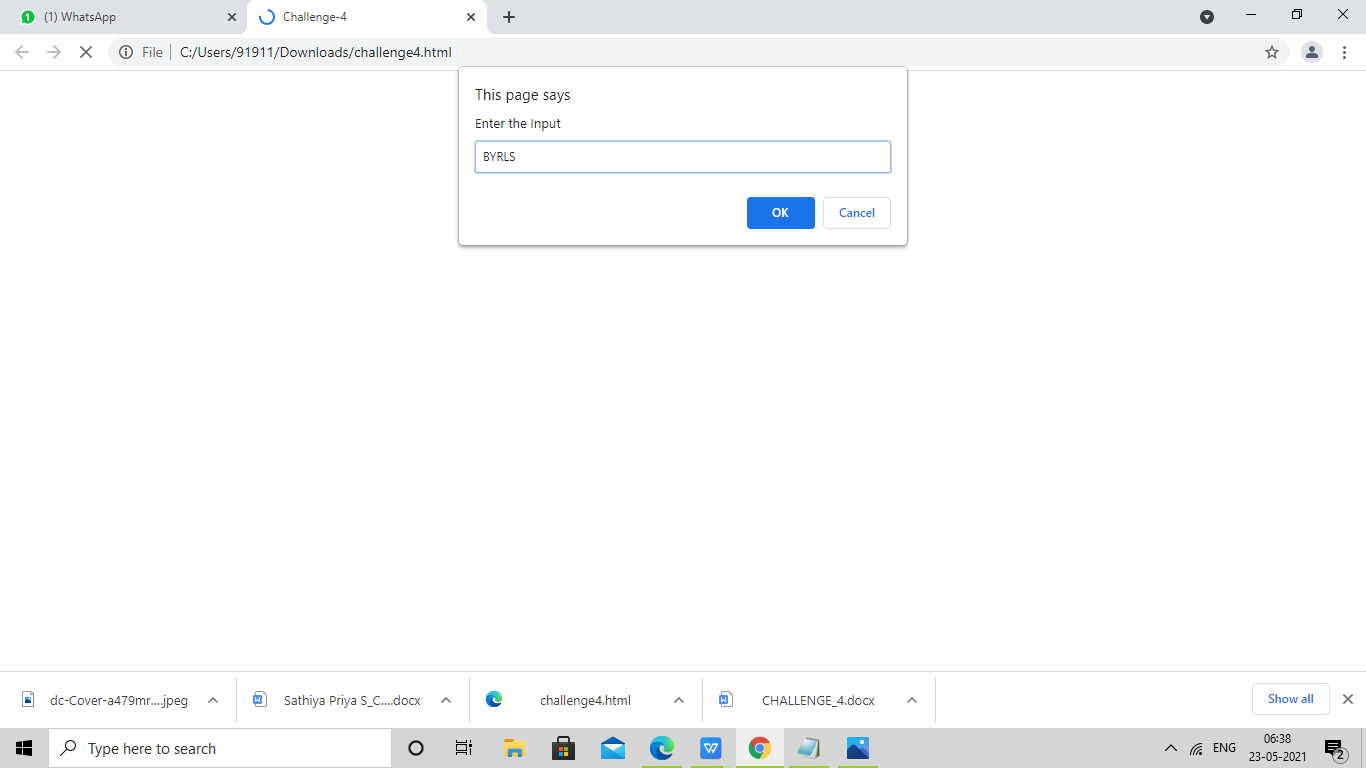












1. **OUTPUTS**

