

JS Language

Prerequisites for this JS Tutorial

Before starting with this JS tutorial, learners should complete the HTML and CSS tutorials provided earlier. You will need the `index.html` file created in the previous lessons.



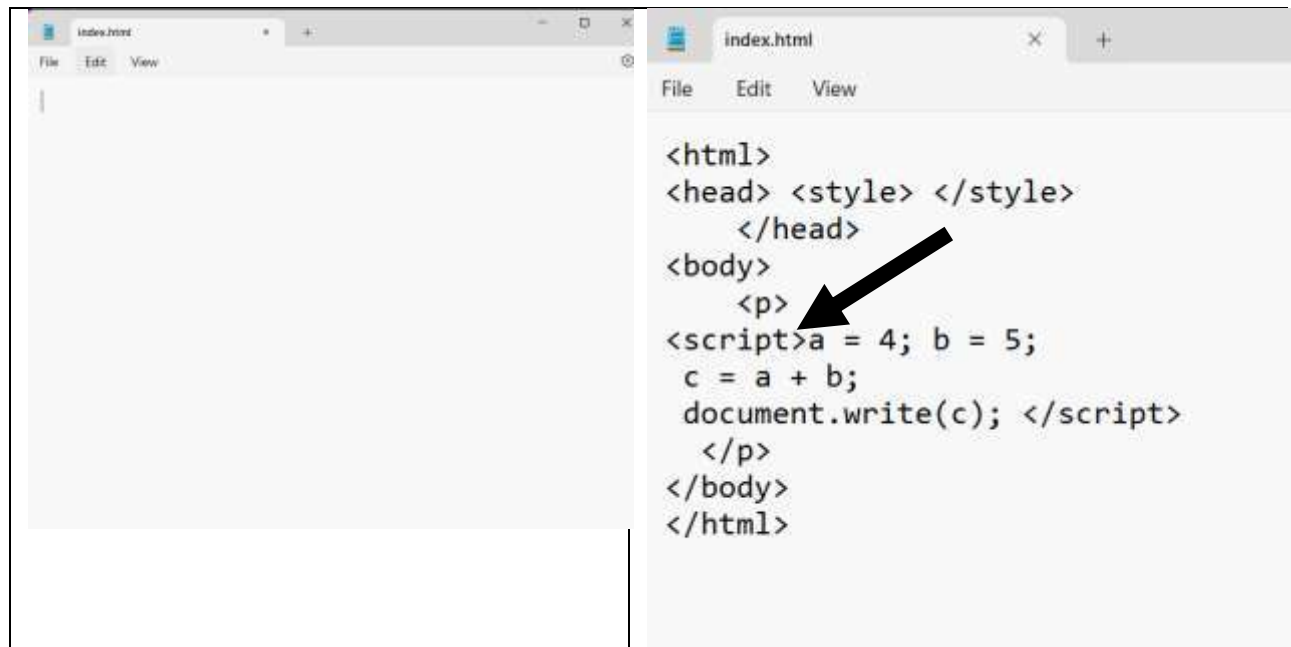
Step 1: Sit at your computer with this mobile app and open the `index.html` file from the previous HTML tutorial.



Begin by opening the `index.html` file in notepad, delete everything and type the following code:

```
<html>
<head> <style> </style>
  </head>
<body>
  <p>
<script>a = 4; b = 5;
  c = a + b;
  document.write(c); </script>
  </p>
</body>
</html>
```

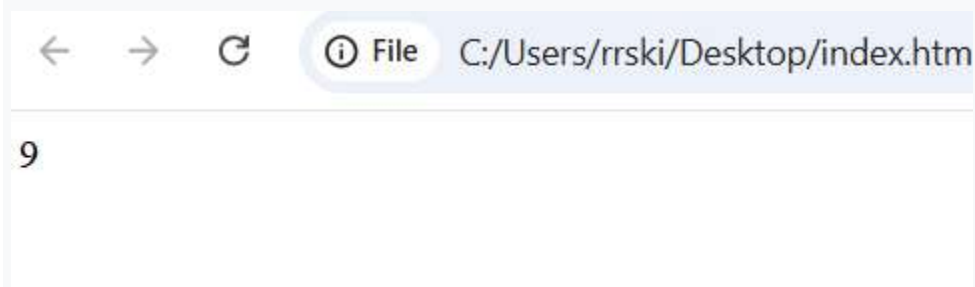
Type it and do not copy and paste. Observe `<script></script>` tags.



This code demonstrates how Javascript is structured, and the `<script>` tags are used for executing Javascript Language.

Step 2: View the Output

Save the file and open it in your browser to see the 9 output as five added to four is nine.



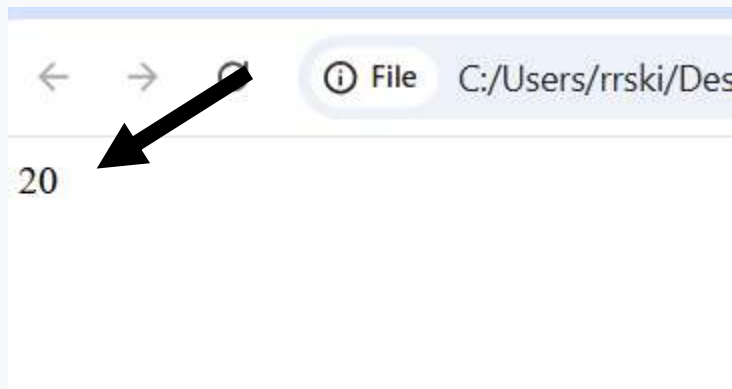
Code Explanation: In the above script, the variable 'a' is assigned the value 4, and the variable 'b' is assigned the value 5. The variable 'c' is then calculated as the sum of 'a' and 'b'. To display the result, the JavaScript function `document.write(c)` is used. The semicolon ; is included to separate individual statements in the code.

Step 3: Try to multiply a and b i.e a*b

Similar lines try to do some mathematics.

Update the `index.html` file with the following code:

```
<html>
<head>
  <style>
  </style>
</head>
<body>
  <p> <script>a = 4; b = 5;
  c = a * b;
  document.write(c); </script> </p>
</body>
</html>
```



Step 4: View the Styled Output

Save the updated file and open it in your browser. You will get 20 as output as five multiplied by four is twenty.

Summary

Using Javascript inside the `<script>` tag allows you to directly define the javascript program logic for your HTML elements. This example showcases how to add two numbers or multiply two numbers using `<script></script>` tags. Modify. Continue experimenting with Javascript to explore additional simple mathematical operations.

Extra Tutorials

Combining HTML and Javascript.

Display addition of two numbers as $c=a+b=20$.

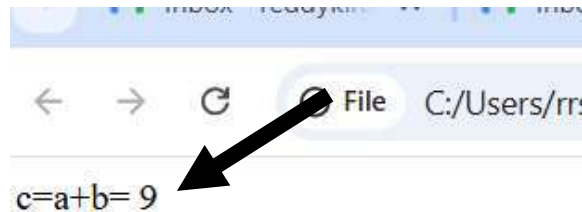
```
<html>
<head> <style> </style>
</head>
<body>
  <p> c=a+b=

<script>a = 4; b = 5;
  c = a + b;
  document.write(c); </script>

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

Write outside the script to display HTML content.

As $c=a+b$ is outside the javascript `<script></script>` tags and it will not affect the Javascript code.



Now combining HTML, CSS and Javascript

```
<html>
<head> <style>
p {
  color: red;
} </style>

</head>
<body>

  <p>
c=a+b=

<script>a = 4; b = 5;
  c = a + b;
  document.write(c); </script>

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

Now in one program we have

`<style></style>` for CSS

`<p></p>` for HTML

`<script></script>` for Javascript

The text will be in red color.



Javascript Tutorials

JavaScript Variables can be declared in 4 ways we will learn how to declare using *var*

Using var

Example:

```
<html>
<head> <style>
p {
color: red;
} </style>

</head>
<body>

<p>
<script>
    var x = 10;

// var allows re-declaration and
reassignment

document.write("x = " + x + "<br>");

</script>

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

Now in one program we have



```
index.html
File Edit View
<head> <style>
p {
color: red;
} </style>

</head>
<body>

<p>
<script>
    var x = 10;

// var allows re-declarat
document.write("x (var):
```

Output



x = 10

Code Explanation:

```
document.write("x = " + x + "<br>");
```

Inside the document.write()
function we have added html
codes within “ ” double quotes.

Another Example:

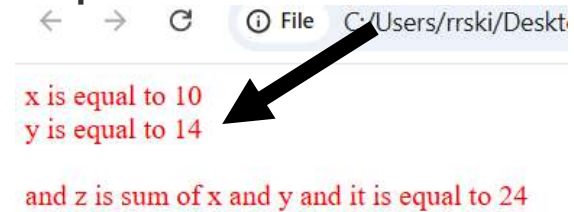
```
<html>
<head> <style>
p {
color: red;
} </style>

</head>
<body>

<p>
<script>
var x = 10;
var y = 14;
var z = x+y;
document.write("x is equal to " + x +
"<br>" + "y is equal to " + y +
"<br><br> and " + "z is sum of x and y
and it is equal to " + z + "<br>");
</script>

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

Output



x is equal to 10
y is equal to 14
and z is sum of x and y and it is equal to 24

As you can see.. html text and html tags are displayed using document.write() function.

Now the same code we will modify and create a small program which takes x and y from the user and gives z value as sum.

```
<html>
<head> <style>
</style> </head>
<body>
<p>
<script>
// Prompt the user to enter two
numbers

var x = parseFloat(prompt("Enter the
first number (x):"));

var y = parseFloat(prompt("Enter the
second number (y):"));

z = x + y;

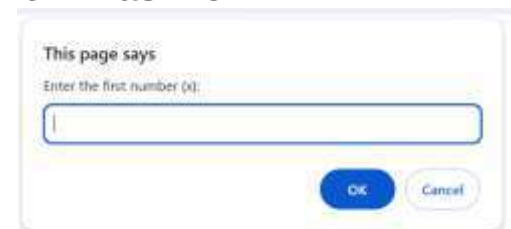
document.write("x = " + x + "<br>");
document.write("y = " + y + "<br>");

document.write("The sum of x and y (z)
is: " + z + "<br>");
</script>

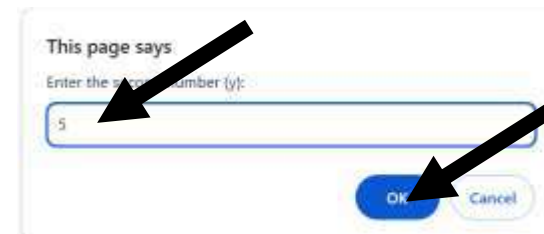
</p>
</body>
</html>
```

Output

It will ask for x



Enter x = 5 and Press OK.



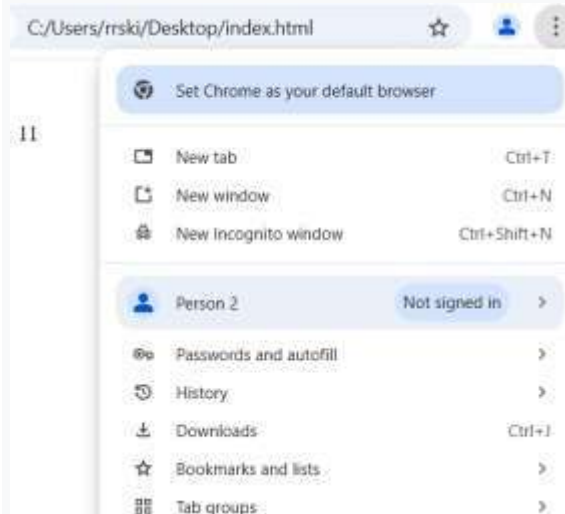
Enter y = 6 and Press OK.



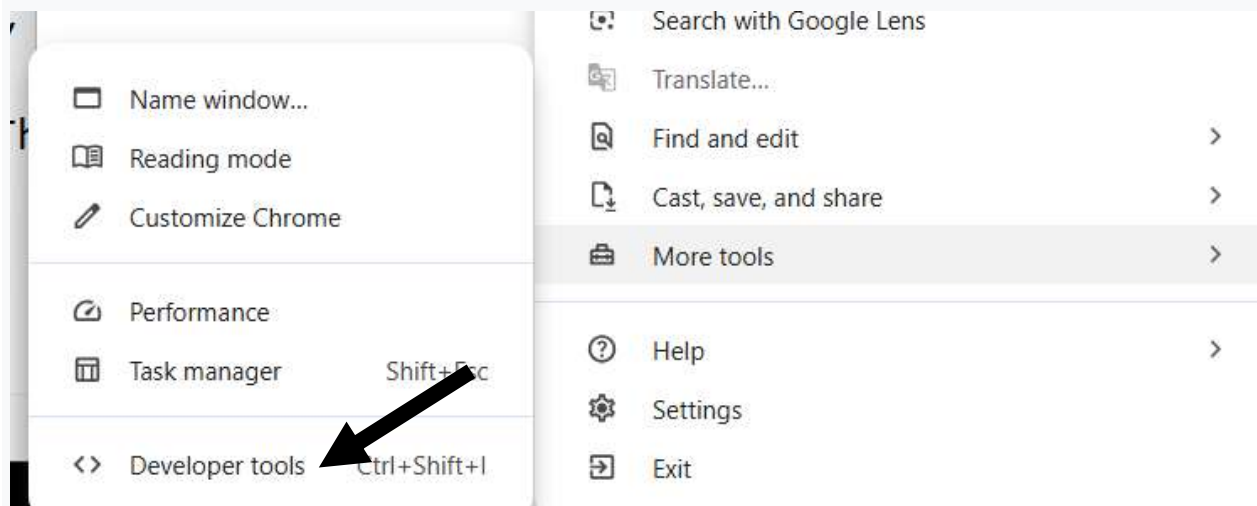
This is the first javascript program.

Let us learn, how to check for errors inside javascript program.

In Google Chrome Click the three dots at the right side corner.



Scroll down and click “More Tools” – Developer Tools



Click Console



Continue with the next tutorial.