

Kongu Engineering College, Perundurai, Erode-638060.

Department of Computer Science and Engineering

III CSE A

14ITT52 - Web Technology Tutorials

Tutorial 04

22.08.19 (5th, 6th hour) - Math Object & Events Max Marks :10

1. Write a JavaScript code to compute the value of 'c' using the equation $c^2 = \sqrt{a^2 + b^2}$. Get the values of 'a' and 'b' from the user through textboxes and display the value of 'c' in another textbox when that textbox gets focus.(Make use of suitable functions of Math object). (1)
2. Write a JavaScript function named randomColor() to generate a random roll number and display the same in a random color. (1)
3. Write a script that defines four functions to round a number x which is obtained as input in various ways: (3)

- a) roundToInteger(number)
- b) roundToTenths(number)
- c) roundToHundredths(number)
- d) roundToThousandths(number)

The number 'x' should be between 0 and 1. If not alert the user to enter the correct number. With the number 'x', your program should display the original value, the number rounded to the nearest integer, the number rounded to the nearest tenth, the number rounded to the nearest hundredth and the number rounded to the nearest thousandth.

Example: If the number 'x' is 0.5641 then the answers should be 5, 56, 564, and 5641.
Display the values in the following format:

Original Value	0.5641
Nearest Integer	5
Nearest Tenth	56
Nearest Hundredth	564
Nearest Thousandth	5641

math1

<html>

<head>

<title>MATH</title>

<script>

function validate()

{

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

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

a=parseInt(a);

b=parseInt(b);

var c=Math.pow(a, 2);

var d=Math.pow(b, 2);

var e=c+d;

var f=Math.sqrt(e);

f=Math.sqrt(f);

document.getElementById("c").value = f;

}</script>

<center></head><h1>MATH OBJECT</h1>
<body>

Enter First Number :

<input type="text" id="a" name="TextBox1">

Enter Second Number :

<input type="text" id="b" name="TextBox2">

<input type="button" name="cl" value="Display Result" onclick="validate()">

 Result :

<input type="text" id="c" name="TextBox3">

</body></head></html></center>

math2

<html>

<head>

<link rel="stylesheet" type="text/css" href="3.php">

</head>

<body>

<center><h2>JavaScript Math</h2>

<input type="button" name="cl" value="RANDOM ROLLNUMBERS" onclick="randomcolor()">

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

<script>

function randomcolor()

{

var letters = "0123456789ABCDEF";

var c = '#';

for (var i = 0; i < 6; i++)

c += letters[(Math.floor(Math.random() * 16))];

document.getElementById("demo").innerHTML = "17CSR"+

Math.floor(Math.random() * 250);


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document.getElementById("demo").style.color = c;
document.getElementById("demo").style.fontSize = "xx-large";
}</script>
</body>
</html>

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math3
<html>
<head>
<title>MATH</title>
<script>
function validate()
{
    var a=document.getElementById("a").value;
    a=parseFloat(a);
    if(a<=0 || a>=1)
    alert("Please Enter between 0 and 1");
    else
    {
        var num,b;
        document.getElementById("demo").innerHTML="Orginal Value="+a;
        num=a*10;
        num=parseInt(num);
        b = num.toFixed();
        document.getElementById("demo1").innerHTML="Nearest Integer="+b;
        num=a*100;
        b = num.toFixed();
        document.getElementById("demo2").innerHTML="Nearest Tenth="+b;
        num=a*1000;
        b = num.toFixed();
        document.getElementById("demo3").innerHTML="Nearest Hundreth="+b;
        num=a*10000;
        b = num.toFixed();
        document.getElementById("demo4").innerHTML="Nearest Thousandth="+b;
    }
}</script>
</head><body> <center><h1>MATH OBJECT</h1><br>
Enter Number Between 0 and 1 : <br><br>
<input type="text" id="a" name="TextBox1">
<br>
<input type="button" name="cl" value="Result" onclick="validate()">
<br><br>
<p id="demo"></p>
<p id="demo1"></p>
<p id="demo2"></p>
<p id="demo3"></p>
<p id="demo4"></p>
</center></body></html>

```