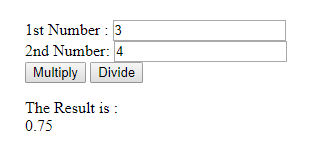
|  |  |  |
| --- | --- | --- |
| **Kingdom of Saudi Arabia**  **Ministry of Higher Education**  **Prince Sattam bin Abdul Aziz University**  **College of Computer Engineering & Sciences** | http://www.psau.edu.sa/public/images/backgrounds/text/logo-sau.png | **المملكة العربية السعودية**  **وزارة التعليم العالي**  **جامعة الأمير سطام بن عبدالعزيز كلية هندسة وعلوم الحاسب** |
| **Course Code and Title: CS-3821** | **CS-3821**  Lab 6 |  |
| Web Applications Programming |
| **1438-39 H** |

**Exercise 1**

Write a JavaScript program to calculate multiplication and division of two numbers (input from user).



<!DOCTYPE html>

<html>

<head>

<script>

function multiplyBy()

{

num1 = document.getElementById("firstNumber").value;

num2 = document.getElementById("secondNumber").value;

document.getElementById("result").innerHTML = num1 \* num2;

}

function divideBy()

{

num1 = document.getElementById("firstNumber").value;

num2 = document.getElementById("secondNumber").value;

document.getElementById("result").innerHTML = num1 / num2;

}

</script>

<meta charset=utf-8 />

<title>JavaScript program to calculate multiplication and division of two numbers </title>

<style type="text/css">

body {margin: 30px;}

</style>

</head>

<body>

<form>

1st Number : <input type="text" id="firstNumber" /><br>

2nd Number: <input type="text" id="secondNumber" /><br>

<input type="button" onClick="multiplyBy()" Value="Multiply" />

<input type="button" onClick="divideBy()" Value="Divide" />

</form>

<p>The Result is : <br>

<span id = "result"></span>

</p>

</body>

</html>

**Exercise 2**

Consider the following HTML document:

<!**DOCTYPE** html>

<**html**>

<**head**>

<**meta** *http-equiv*="Content-Type" *content*="text/html; charset=UTF-8" />

<**title**>Best Scores </**title**>

</**head**>

<**body**>

<**form** *action*="#">

<**label**>New Score:

<**input** *id* ="newScore" *type*="number" *placeholder*="Enter a new score here...">

</**label**>

<**input** *id* ="addButton" *type*="button" *value*="+">

<**div** *id* = "scoresTable"></**div**>

</**form**>

</**body**>

</**html**>

This document displays 2 inputs mainly: a number field and a button.



The utility of this page is to save the 3 best scores from a series of scores entered successively by the user.

|  |  |
| --- | --- |
| 1 | 3 |
| 2 | 4 |

**Your are asked to write a separate JavaScript file that uses array and function(s) to keep only the 3 best scores and display them as HTML table.**

**Suggestions:** declare an array as global variable and 3 functions: start (to add an event listener to the button), addScore (that performs the comparison and update the array), and updateScores (re-display the content of the array in the HTML table).

**Solution:**

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />

<title>Best Scores </title>

<script src = "Myscript.js"></script>

</head>

<body>

<form action="#">

<label>New Score:

<input id ="newScore" type="number" placeholder="Enter a new score here...">

</label>

<input id ="addButton" type="button" value="+" onclick="start()">

<div id = "scoresTable">

<b>3 Best Scores<b>

<div id ="n1">0</div>

<div id="n2">0</div>

<div id="n3">0</div>

</div>

</form>

</body>

</html

Myscript.js

var XArray= new Array(0,0,0)

var x;

function start(){

x=document.getElementById("newScore").value;

x=parseInt(x);

addScore();

}

function addScore(){

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

if(XArray[i]<x)

{

if(i==0){

XArray[i+2]=XArray[i+1];

XArray[i+1]=XArray[i]

}

else

if(i==1)

XArray[i+1]=XArray[i]

XArray[i]=x;

break;}

}

updateScores();

}

function updateScores(){

document.getElementById("n1").innerHTML = XArray[0];

document.getElementById("n2").innerHTML = XArray[1];

document.getElementById("n3").innerHTML = XArray[2];

}