

1. Write using JavaScript: how to know which mouse button was clicked, number of elements in form, and write hello world.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html>

<head>

<title>Title of the Page</title>

<script language="JavaScript">

document.write("hello world");

function message(element)

{

alert("You clicked the " + element + " element!");

}

function myFunction() {

alert("hello");

    var x = document.frm.length;

    alert(x);

}

</script>

</head>

<body>

<form name="frm">

<input type="radio" name="Radio" onClick="message('Radio Button 1')">Option 1<br>

<input type="radio" name="Radio" onClick="message('Radio Button 2')">Option 2<br>

<input type="checkbox" onClick="message('Check Button')">Check Button<br>

<input type="submit" value="Send" onClick="message('Send Button')">
```

```
<input type="reset" value="Reset" onClick="message('Reset Button')">
<input type="button" value="Mine" onClick="message('My very own Button')">
<input type="submit" value="no of ele" onclick="myFunction()" />
</form>
</body>
</html>
```

2. Differentiate between server side and client side scripting languages. Write HTML and JavaScript to take input for loginname, password, birthdate, email address, phone no. and validate them.

Refer form validation program.

3. Write an HTML file with Javascript that finds position of first occurrence of vowel “a”, last occurrence of vowel “a” in a given word and returns the string between them. For example, ajanta- then script would return first occurrence of “a”-that is position 1 and last occurrence-6 and string between them is “jant”.

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Untitled Document</title>
<script type="text/javascript">
var str=prompt("enter string");
var strlen=str.length;
alert(strlen);
var frstletter = str.charAt(0);
var lastletter = str.charAt(strlen);
alert(frstletter);
if(frstletter=='a' || lastletter=='a' )
{
    document.write("string is in proper format");
}
for(var index = 0;index < strlen;index++)
{

    if(str.charAt(index)!='a' && str.charAt(strlen)!='a' )
    {
        var str1 = str.charAt(index);
```

```
        alert(str1);
        document.write("<br/>" + str1);
    }
}
</script>
</head>
<body>
</body>
</html>
```

- 4. Write a JavaScript that handles following mouse events. Add necessary elements. (i) If findtime button is clicked show time and date information. (ii) If button named “red” is clicked, background should change to red and If button named “green” is clicked, background should change to green.**

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Untitled Document</title>
<script type="text/javascript">
function showdttime()
{
document.getElementById("demo").innerHTML = Date();
}
function changebackground(val)
{
    if(val=='red')
    {
        document.body.style.background="red";
    }
    else if(val=='green')
    {
        document.body.style.background="green";
    }
}
</script>
</head>
<body>
<p id="demo"></p>
```

```
<input type="button" onclick="showdatetime()" value="finddatetime" />
<input type="button" id="rbtn" onclick="changebackground('red')" value="redbutton"/>
<input type="button" id="gbtn" onclick="changebackground('green')" value="greenbutton"/>
</body>
</html>
```

- 5. Write a JavaScript that handles following mouse events. Add necessary elements. (i) JavaScript gives the key code for the key pressed. (ii) If the key pressed is “a”, “e”, “i”, “o”, “u”, the script should announce that vowel is pressed. (iii) When the key is released background should change to blue.**

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Untitled Document</title>
<script type="text/javascript">
```

```
window.onkeyup = changebgcolor;
```

```
function myKeyPress(e){
```

```
    var keynum;
```

```
        if(window.event){ // IE
```

```
            keynum = e.keyCode;
```

```
        }else
```

```
            if(e.which){ // Netscape/Firefox/Opera
```

```
                keynum = e.which;
```

```
            }
```

```
                var char1=String.fromCharCode(keynum);
```

```
                //for vowel
```

```
        if(char1=='a' || char1=='e' || char1=='i' || char1=='o' || char1=='u')
        {
            alert("you have pressed vowel");
        }

        alert("you pressed "+char1 +" & keycode for that is "+ keynum);
    }
function changebgcolor()
{

document.getElementById("txt1").style.backgroundColor = "blue";
}
</script>
</head>
<body>
<form>
    <input type="text" id="txt1" onkeyup="changebgcolor()" onkeypress="myKeyPress(event)" />
</form>

</body>
</html>
```

**6. Write a JAVAScript to print characters of a string at odd positions.(for example for the string India, I, d and a should get printed).**

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Untitled Document</title>
```

```
<SCRIPT language="JavaScript">
var yourname=prompt('Enter your name, NOW!',"");
var mychar, value;
for (var i=1; i<=yourname.length; i++)
{
    // Modulo operator (%) - returns remainder when divide by
    if (i % 2 == 1)
    {
        // Odd
        mychar = yourname.charAt(i-1);
        alert(mychar + '..... available at odd position :.... ' + i);
    }
}
</SCRIPT>
</head>
<body>
</body>
</html>
```

- 7. (ii) Write a JAVAScript to take 2 digit number and then separate these 2 digits, then multiply first digit by itself for second digit times.( for example, 23 should be separated as 2 and 3. 2 should multiply with itself 3 times).**

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Untitled Document</title>

<script type="text/javascript">
```

```
//var num=

var num=parseInt(prompt(("enter no")));

    var rem=num%10;

document.write("you have entered:" + num + "<br/>")

    var quat=parseInt(num/10);

    var result=Math.pow(quat, rem);

    document.write(quat+" power of "+rem+" = "+ result);

</script>
</head>
<body>
</body>
</html>
```

**8. Write a JavaScript that uses function to calculate how many days are left in your birthday?**

```
<html>
<head>
<title>(Type a title for your page here)</title>
<script type="text/javascript">
var month = parseInt(prompt("enter your birth month (1-12)", "")) - 1);

var day = parseInt(prompt("enter your birth day(1-31)", ""));

var birthday = new Date();
var currentdate = new Date();
var one_day=1000*60*60*24;

birthday.setDate(day);
birthday.setMonth(month);
birthday = birthday.getTime();
currentdate = currentdate.getTime();
```

```
var theDate = birthday - currentdate;
document.write(theDate+"<br/>");
theDate = (theDate / one_day);

document.write("days left are " + theDate.toFixed(0) + " in your birthday ");

</script>
</head>
</html>
```

**9. Write a JavaScript, that uses a loop, that searches a word in sentence held in an array, returning the index of the word.**

```
<html>

<head>

<title>Untitled Document</title>

</head>

<body>

<script type="text/javascript">

var str = prompt("enter string");

var srchword=prompt("enter word to search in string");

var copyword=0;

var temp = new Array();

temp = str.split(" ");

alert(temp.length);

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

{

    if(srchword.match(temp[i]))

    {

        copyword=srchword.match(temp[i]);

        var pos = temp.indexOf(srchword);
```



```
document.write(srchword+" found in your array at "+ pos +" position" );
copyword=-1;
}
}
if(copyword==0)
{
    document.write(srchword+" not found in your array");
}
</script>
</body onload=containsAny()>
</html>
```

**10. Show the use of events for the following with example. (i) Trap the exiting of the user from a page. (ii) Show the heading. When the mouse is over the heading the background color should be yellow and when the mouse goes out of the heading, color should change to black.**

Ans.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<title>Untitled Document</title>
<script language="JavaScript">
    window.onbeforeunload = confirmExit;
    function confirmExit()
    {
```

```
    return "You have attempted to leave this page. If you have made any changes to the fields  
without clicking the Save button, your changes will be lost. Are you sure you want to exit this  
page?";
```

```
}
```

```
function over()
```

```
{
```

```
    document.getElementById("head1").style.backgroundColor="yellow";
```

```
}
```

```
function out()
```

```
{
```

```
    document.getElementById("hid").style.color="white";
```

```
    document.getElementById("head1").style.backgroundColor="black";
```

```
}
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<div id="head1"><h1 id="hid" onmouseover="over()" onmouseout="out()" >This is heading1  
style.</h1></div>
```

```
</body>
```

```
</html>
```

**11. Write an HTML and JavaScript program which accepts N as input and displays first N Fibonacci numbers as list.**

Ans. <HTML>

<HEAD>

<TITLE>Fibonacci series by Kashid</TITLE>

```
<script>
function display()
{
    var n=parseInt(frm.t1.value)
    var a=0,b=1,c=0,s=" ";

    while((a+b)<=n)
    {
        c=a+b;

        s=s+c+ " , ";

        b=a;
        a=c;
    }

    alert("Fibonacci Series: "+s)
}
</script>
</HEAD>
<BODY>
<form name=frm>
    <input type=text name=t1>
    <input type=button name=b1 onclick="display();" value="fibonacci series">
</form>
```

&lt;/BODY&gt;

&lt;/HTML&gt;

**12. Design an login form using HTML and JavaScript with following validations on password field : minimum length 8 characters, it should have some special character.**

&lt;!DOCTYPE html&gt;

&lt;html lang="en"&gt;

&lt;head&gt;

&lt;title&gt;JavaScript form validation - Password Checking - 3&lt;/title&gt;

&lt;/head&gt;

&lt;body&gt;

<h2>Input Password and Submit [7 to 16 characters which contain numeric digit,character and a special character]</h2>

&lt;form name="form1" action="#"&gt;

enter Usernamr:&lt;input type='text' name='text2'/&gt;&lt;br/&gt;&lt;br/&gt;

enter password:&lt;input type='password' name='text1'/&gt;&lt;br/&gt;&lt;br/&gt;

<input type="submit" name="submit" value="Submit"  
onclick="CheckPassword(document.form1.text1)"/>

&lt;/form&gt;

&lt;script type="text/javascript"&gt;

function CheckPassword(inputtxt)

{

var minNumberOfChars = 7;

var maxNumberOfChars = 16;

var regularExpression = /^[a-zA-Z0-9!@#\$\$%^&amp;\*.\_-]{7,16}\$/;

if(inputtxt.value.match(regularExpression))

```
{  
alert('password is correct') ;  
return true;  
}  
else  
{  
alert('must enter number,char,spacial character.')  
return false;  
}  
}  
</script>  
</body>  
</html>
```