

# علوم الحاسب الفرقة الثانية

**Lab #5**

# برمجة الويب

**Web Programming**

# HTML

## Q1. State HTML Basic Tags.

### ⇒ Text display:

<em>, <strong>, <em>

### ⇒ Structure:

<h1>, <h2>, <h3>

<p>

<ul>, <ol>, <blockquote>

### ⇒ Attributes:

Align, text, bgcolor, etc.

### ⇒ Links:

<a href="...">...</a>

### ⇒ Images:

 an empty tag

### ⇒ Tables

### ⇒ Forms

## Q2. Write HTML Tags to design the next page.

An Example

Hello World!

I am 21.

VII. Green

VIII. Yellow

- John
- Mike

```
<html>
```

```
<head>
```

```
<title>An Example</title>
```

```
</head>
```

```
<body>
```

```
<h3><hr>An Example</h3>
```

```
<p align="left">
```

```
<font face="Comic Sans MS" size="4"><b>
```

```
Hello World!</b></font>
```

```
</p>
```

```
<p align="right">
<font size="5"><u>I am 21.</u></font>
<ol type="I" start=7>
<li><font color=#00FF00>Green</font></li>
<li>Yellow</li>
<ul type=square>
<li>John</li>
<li>Mike</li>
</ul>
</ol>
</p>
</body>
</html>
```

## Java Script

### Q3. State Java Script characteristics

1. Case sensitive.
2. Object oriented.
3. Produces an HTML document.
4. Dynamically typed.
5. Standard operator precedence.
6. Overloaded operators.
7. Reserved words.
8. Division with / is not integer division.
9. Modulus (%) is not an integer operator
10. 5 / 2 yields 2.5
11. 5.1 / 2.1 yields 2.4285714285714284
12. 5 % 2 yields 1
13. 5.1 % 2.1 yields 0.8999999999999995
14. " and ' can be used in pairs.
15. Scope rules for variables.

16. Strings are very common data types.
17. Rich set of methods available.
18. Arrays have dynamic length.
19. Array elements have dynamic type.
20. Arrays are passed by reference.
21. Array elements are passed by value.

#### **Q4. What is DHTML?**

##### **Dynamic Hyper Text Markup Language.**

- ⇒ Make dynamic / interactive web-pages on the client side.
- ⇒ Use of a collection of technologies together to do this, including
  1. Markup language (HTML, XML, etc.)
  2. Scripting language (JavaScript, etc.)
  3. Presentation language (CSS etc.)

#### **Q5. Write HTML and /Java Script to print welcome message when the page load.**

```
<html>
<head>
<script type="text/javascript">
    document.write ("Welcome");
</script>
</head>
</html>
```

Note: You can use CSS in side Java Script.

```
document.writeln( "<FONT COLOR='magenta' size=3><H1>Welcome to ", "Welco
me</H1></FONT>" );
```

**Q6. What is output of the next following?**

```
<!DOCTYPE html>
<HTML>
<HEAD>
<TITLE> Using document.write </TITLE>
<SCRIPT TYPE="text/javascript">
document.write ("<H1>Welcome to");
document.writeln("JavaScript Programming!</H1>" );
</SCRIPT>
</HEAD>
<BODY>
</BODY>
</HTML>
```

**Welcome to JavaScript Programming!**

**Q7. Write java Script code to print Welcome to java Script in alert.**

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> ALert </TITLE>
<SCRIPT TYPE="text/javascript">
window.alert( "Welcome to\nJavaScript\nProgramming!" );
</SCRIPT>
</HEAD>
<BODY>
<P>Click Refresh (or Reload) to run this script again.</P>
</BODY>
</HTML>
```

**Q8. Write java script code to accept two numbers from user then display sum**

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> JavaScript </TITLE>
<SCRIPT TYPE="text/javascript">
    var firstNumber, secondNumber, number1, number2, sum;
    firstNumber = window.prompt("Enter first integer", "0" );
    secondNumber = window.prompt( "Enter second integer", "0" );
    firstNumber = parseInt(firstNumber);
    number2 = parseInt( secondNumber );
    sum = firstNumber + number2;
    document.writeln( "<H1>The sum is " + sum + "</H1>" );
</SCRIPT>
</HEAD>
<BODY>
<P>Click Refresh</P>
</BODY>
</HTML>
```

**Q9. Write java script to design the next page**

## Random Numbers

3	3	5	2	4
3	4	4	6	5
5	2	1	3	1
6	2	6	5	6

```
<!DOCTYPE HTML>
```

```

<HTML>
<HEAD>
<TITLE> Using window.alert </TITLE>
<SCRIPT TYPE="text/javascript">
    var value;
    document.writeln( "<H1>Random Numbers</H1>" +
        "<TABLE BORDER = '1' WIDTH = '50%'> <TR>" );
    for ( var i = 1; i <= 20; i++ )
    {
        value = Math.floor( 1 + Math.random() * 6 );
        document.writeln( "<TD>" + value + "</TD>" );
        if ( i % 5 == 0 && i != 20 )
            document.writeln( "</TR><TR>" );
    }
    document.writeln( "</TR></TABLE>" );
</SCRIPT>
</HEAD>
<BODY>
</BODY>
</HTML>

```

**Q10. What is output from the following code?**

```

<html>
<body>
<script type="text/javascript">
var count = 0;
document.write("Starting Loop" + "<br />");
do{
    document.write("Current Count : " + count + "<br />");
    count++;
}while (count < 5);
document.write ("Loop stopped!");
</script>
<p>Set the variable to different value and then try...</p>
</body>
</html>

```

```
Starting Loop
Current Count : 0
Current Count : 1
Current Count : 2
Current Count : 3
Current Count : 4
Loop stopped!

Set the variable to different value and then try...
```

**Q11. Write java script code for printing all Navigators objects.**

```
<html>
<body>
<script type="text/javascript">
var aProperty;
document.write("Navigator Object Properties<br /> ");
for (aProperty in navigator)
{
    document.write(aProperty);
    document.write("<br />");
}
document.write ("Exiting from the loop!");
</script>
<p>Set the variable to different object and then try...</p>
</body>
</html>
```

**Q12. Write Java Script function accept 3 numbers as parameter then return max, test function to print the following.**

```
First number: 10
Second number: 20
Third number: 30
Maximum is: 30
```

```
<html>
<body>
```



```

<SCRIPT TYPE = "text/javascript">
    var input1 = window.prompt( "Enter first number", "0" );
    var input2 = window.prompt( "Enter second number", "0" );
    var input3 = window.prompt( "Enter third number", "0" );
    var value1 = parseFloat( input1 );
    var value2 = parseFloat( input2 );
    var value3 = parseFloat( input3 );
    var maxValue = maximum( value1, value2, value3 );
    document.writeln( "First number: " + value1 +
    "<BR>Second number: " + value2 +
    "<BR>Third number: " + value3 +
    "<BR>Maximum is: " + maxValue );
    function maximum( x, y, z ) {
        var max =x;
        if (max<y)
        {max=y;}
        if (max<z)
        {max=z;}
        return max;
    }
</SCRIPT>

```

```
</body>
```

```
</html>
```

**Q13. Write Java Script function accepts name and age as a parameters.  
Then display it when load page.**

```

<html>
<head>
<script type="text/javascript">
function sayHello(name, age)
{
    document.write (name + " is " + age + " years old.");
}
</script>
</head>
<body onload="sayHello('ali', 7)">
</body>
</html>

```

**Q14. Write HTML, JavaScript: When the user click button accept student name with input and print welcome message with name.**

```
<html>
<head>
<script type="text/javascript">
function welcome(){
    var x;
    x=document.getElementById("t1").value;
    x= x+ "You are welcome ";
    alert(x);
}
</script>
</head>
<body>
<form action="first.html" method="Get">
<p>Enter your name:
<input type="text" id="t1" name="t1" maxlength="50">
<input type="Button" name="b1" value="Click" onClick="welcome()">
<br>
</form>
</body>
</html>
```

⇒ **Events to execute java Script:**

1. **Onsubmit:** call when submit button is clicked.
2. **OnClick:** call when this button is clicked.
3. **Onreset:** call when the reset button is clicked.
4. **Onload:** call after page loads.
5. **Onmouseover:** call when mouse pointer enters image area.
6. **Onmouseout:** call when mouse pointer leaves image area.
7. **Onfocus:** call when control receives focus.
8. **Onblur:** call when a control loses focus.
9. **OnChange:** call when a control loses focus and the value of its contents has changed many more.