**Javascript:**

JavaScript was initially created to “make web pages alive”.

The programs in this language are called scripts. They can be written right in a web page’s HTML and run automatically as the page loads.

Scripts are provided and executed as plain text. They don’t need special preparation or compilation to run.

JavaScript is very different from another language called Java.

**Example:**

```html
<html>
  <body>
    <script language="javascript" type="text/javascript">
      <!--
        document.write("Hello World!"
      -->
    </script>
  </body>
</html>
```

**Advantages of Javascript:**

- Full integration with HTML/CSS.
- Simple things are done simply.
- Support by all major browsers and enabled by default.

**Javascript Statements:**

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>break</td>
<td>Terminates a switch or a loop</td>
</tr>
<tr>
<td>continue</td>
<td>Jumps out of a loop and starts at the top</td>
</tr>
<tr>
<td>do ... while</td>
<td>Executes a block of statements, and repeats the block, while a condition is true</td>
</tr>
<tr>
<td>Keyword</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>for</td>
<td>Marks a block of statements to be executed, as long as a condition is true</td>
</tr>
<tr>
<td>function</td>
<td>Declares a function</td>
</tr>
<tr>
<td>if ... else</td>
<td>Marks a block of statements to be executed, depending on a condition</td>
</tr>
<tr>
<td>return</td>
<td>Exits a function</td>
</tr>
<tr>
<td>switch</td>
<td>Marks a block of statements to be executed, depending on different cases</td>
</tr>
<tr>
<td>try ... catch</td>
<td>Implements error handling to a block of statements</td>
</tr>
<tr>
<td>var</td>
<td>Declares a variable</td>
</tr>
</tbody>
</table>

**JavaScript Operators**

- **Arithmetic Operators**
  - Addition
  - Subtraction
  - Division
  - Multiplication
  - Increment
  - Decrement
- **Comparison Operators**
  - Equal
  - Not equal
  - Greater than
  - Less than
- **Logical (or Relational) Operators**
  - AND
  - OR
  - NOT
- **Assignment Operators**
  - Simple and Assignment
  - Add and Assignment
  - Subtract and Assignment
  - Multiply and Assignment
- **Conditional (or ternary) Operators**
**Array**

An array is a special variable, which can hold more than one value at a time.

**Example**

```javascript
var cars = ["Saab", "Volvo", "BMW"];
document.getElementById("demo").innerHTML = cars;
```

**Methods of Javascript:**

- Boolean
- Date
- Function
- Math
- Number
- Object
- String
- RegExp

**Events:**

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>onchange</td>
<td>An HTML element has been changed</td>
</tr>
<tr>
<td>onclick</td>
<td>The user clicks an HTML element</td>
</tr>
<tr>
<td>onmouseover</td>
<td>The user moves the mouse over an HTML element</td>
</tr>
<tr>
<td>onmouseout</td>
<td>The user moves the mouse away from an HTML element</td>
</tr>
<tr>
<td>onkeydown</td>
<td>The user pushes a keyboard key</td>
</tr>
<tr>
<td>onload</td>
<td>The browser has finished loading the page</td>
</tr>
</tbody>
</table>
NOTE: THESE POINTS ARE INDICATIVE AND NOT EXHAUSTIVE. PLEASE ELABORATE THE ANSWERS WITH PROPER EXAMPLES WHEREVER APPLICABLE.

Write answers for following

1 Write a note on Javascript.
2 Explain for loop with example.
3 Explain if..else with example.
4 Explain switch.. case with example.
5 Explain do..while loop with example.
6 Explain following operators with example.
   i. Arithmetic
   ii. Logical
   iii. Comparison
   iv. Assignment
   v. Tertiary

7 Explain array with the help of suitable example.

8 Explain following events with example.
   i. Onchange
   ii. Onclick
   iii. MouseOver
   iv. OnLoad