**What is Javascript ?**

JavaScript is *an object-based scripting language* which is lightweight and cross-platform.

JavaScript (js) is a light-weight object-oriented programming language which is used by several websites for scripting the webpages. It is an interpreted, full-fledged programming language that enables dynamic interactivity on websites when applied to an HTML document.

**Key Features of JavaScript**

1. **Lightweight and Interpreted**:
   * No compilation needed; interpreted directly in the browser.
2. **Cross-platform**:
   * Works across all major browsers (Chrome, Firefox, Edge, etc.).
3. **Versatile**:
   * Can be used for front-end (browser) and back-end (Node.js).
4. **Event Handling**:
   * Listens and responds to events like clicks or form submissions.
5. **Dynamic Typing**:
   * No need to specify variable types (e.g., var a = 5;).

**How JavaScript Works in the Browser**

1. JavaScript is embedded in HTML and executed by the browser.
2. It interacts with the **Document Object Model (DOM)** to manipulate web page content.
3. Runs in a single-threaded environment but can handle asynchronous operations (e.g., API calls).

**3 Places to put JavaScript code :**

1. **Between the body tag of html**
2. **Between the head tag of html**
3. **In .js file (external javaScript)**
4. **JavaScript Example : code between the body tag**

**<body>**

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

**alert("Hello Javatpoint");**

**</script>**

**</body>**

1. **JavaScript Example : code between the head tag**

**<html>**

**<head>**

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

**function msg(){**

**alert("Hello Javatpoint");**

**}**

**</script>**

**</head>**

**<body>**

**<p>Welcome to JavaScript</p>**

**<form>**

**<input type="button" value="click" onclick="msg()"/>**

**</form>**

**</body>**

**</html>**

**3) External JavaScript file**

**message.js**

**function msg(){**

**alert("Hello Javatpoint");**

**}**

**index.html**

**<html>**

**<head>**

**<script type="text/javascript" src="message.js"></script>**

**</head>**

**<body>**

**<p>Welcome to JavaScript</p>**

**<form>**

**<input type="button" value="click" onclick="msg()"/>**

**</form>**

**</body>**

**</html>**