Multi Choice Type Question David is working with a team on a JavaScript project and wants to ensure consistent formatting. What is the recommended approach for code indentation in JavaScript to maintain consistent formatting? Marks : 1 Negative Marks : 0 image Answer here Using two spaces for indentation Using four spaces for indentation Using tabs for indentation Indentation is not required in JavaScript

**ChatGPT said:**

The recommended approach for **consistent code formatting in JavaScript** is:

**Answer:**  
**Using two spaces for indentation**

**Explanation:**

* JavaScript does not enforce a specific indentation style, but most style guides, including the **Airbnb JavaScript Style Guide** and **Google JavaScript Style Guide**, recommend using **2 spaces per indentation level** for readability and consistency.
* Using 4 spaces or tabs is valid but less commonly adopted in modern JS projects.
* Indentation is not optional for code execution, but lack of consistent indentation makes the code hard to read.

**You said:**

Multi Choice Type Question When using the browser's developer tools for debugging, which tab allows you to view the call stack and inspect variables at each step? Marks : 1 Negative Marks : 0 image Answer here Elements Network Sources Console

**ChatGPT said:**

**Answer:**  
**Sources**

**Explanation:**

* The **Sources** tab in browser developer tools allows you to:
  + View and set **breakpoints** in your JavaScript code.
  + **Step through code** line by line.
  + Inspect the **call stack** and **variables** at each execution point.
* **Elements** is for inspecting HTML/CSS, **Network** is for monitoring requests, and **Console** is for logging and executing JavaScript commands.

**You said:**

Multi Choice Type Question Which of the following methods is commonly used for debugging JavaScript code? Marks : 1 Negative Marks : 0 image Answer here console.log() print() debug() alert()

**ChatGPT said:**

**Answer:**  
**console.log()**

**Explanation:**

* console.log() is the most common method for debugging in JavaScript, as it prints values to the **browser console** so you can inspect variable states and program flow.
* print() is not a standard JavaScript function.
* debug() exists in some contexts (like Node.js debugger), but it’s not commonly used for basic debugging in browser JavaScript.
* alert() can show values but is intrusive and not recommended for debugging.

**You said:**

Multi Choice Type Question Which of the following statements best describes what a JavaScript breakpoint does during debugging? Marks : 1 Negative Marks : 0 image Answer here Halts the execution of the program until the developer resumes it manually. Continues the execution of the program, but records all errors encountered. Skips the current line of code where the breakpoint is set and moves to the next line. Automatically fixes any errors in the code and continues execution.

**ChatGPT said:**

**Answer:**  
**Halts the execution of the program until the developer resumes it manually.**

**Explanation:**

* A **breakpoint** in JavaScript pauses the program at a specific line of code, allowing the developer to:
  + Inspect variables, the call stack, and the program state.
  + Step through the code line by line.
* It **does not** automatically fix errors, skip lines, or just record errors—it halts execution until manually resumed.

**You said:**

Multi Choice Type Question Which statement is true about the JavaScript break keyword when used in a loop? Marks : 1 Negative Marks : 0 image Answer here It continues the loop execution with the next iteration. It immediately exits the loop and continues with the next statement after the loop. It restarts the loop from the beginning. It pauses the loop indefinitely until a condition is met.

**ChatGPT said:**

**Answer:**  
**It immediately exits the loop and continues with the next statement after the loop.**

**Explanation:**

* The break keyword in JavaScript **terminates the current loop immediately**, regardless of the remaining iterations, and execution continues with the statement **after the loop**.
* To skip just the current iteration and continue, continue is used.
* break does **not** restart or pause the loop.

**You said:**

Multi Choice Type Question What is the other way of calling the Error Console in Firefox? Marks : 1 Negative Marks : 0 image Answer here Error Window JavaScript Console JavaScript Window Error or JavaScript Window

**ChatGPT said:**

**Answer:**  
**JavaScript Console**

**Explanation:**

* In **Firefox**, the **Error Console** is also referred to as the **JavaScript Console**.
* It allows developers to view **errors, warnings, and logs** generated by web pages.
* Other options like “Error Window” or “JavaScript Window” are incorrect names.

**You said:**

Multi Choice Type Question Which method in the browser's developer tools allows you to test different changes to your JavaScript code temporarily without modifying the original source code? Marks : 1 Negative Marks : 0 image Answer here Live Edit Test Sandbox Code Playground Interactive Console

**ChatGPT said:**

**Answer:**  
**Live Edit**

**Explanation:**

* **Live Edit** in browser developer tools allows you to **modify and test JavaScript code temporarily** directly in the browser without changing the original source files.
* Changes are applied in real-time, helping with quick debugging and experimentation.
* Other options like **Test Sandbox**, **Code Playground**, and **Interactive Console** are not standard names in browser dev tools.

**You said:**

Multi Choice Type Question What kind of error notifications are shown in the console window? Marks : 1 Negative Marks : 0 image Answer here Syntax error Runtime error Both Syntax error and Runtime error Compilation error

**ChatGPT said:**

**Answer:**  
**Both Syntax error and Runtime error**

**Explanation:**

* The **console window** in browsers displays both:
  + **Syntax errors** – mistakes in code structure that prevent execution.
  + **Runtime errors** – errors that occur while the code is running.
* Compilation errors are not applicable in JavaScript, as it is an interpreted language.

**You said:**

Multi Choice Type Question Which method is commonly used to output debugging information in the browser's developer console? Marks : 1 Negative Marks : 0 image Answer here console.debug() console.trace() console.warn() console.info()

**ChatGPT said:**

**Answer:**  
**console.debug()**

**Explanation:**

* console.debug() is commonly used to output **debugging information** in the browser’s developer console.
* Other methods like console.warn() and console.info() are used for warnings and informational messages, while console.trace() shows the **call stack**.

**You said:**

Multi Choice Type Question Emma is working on a JavaScript application and wants to make her code more readable. What is a good practice for naming variables in JavaScript to improve code readability? Marks : 1 Negative Marks : 0 image Answer here Using single-letter variable names like a, b, c. Using long and descriptive variable names that explain the purpose of the variable Using random words or phrases for variable names Using numbers at the beginning of variable names

**ChatGPT said:**

**Answer:**  
**Using long and descriptive variable names that explain the purpose of the variable**

**Explanation:**

* Descriptive variable names improve **code readability and maintainability** by making it clear what the variable represents.
* Single-letter names, random words, or starting variable names with numbers are **poor practices** and can lead to confusion or syntax errors.

**You said:**

Multi Choice Type Question What is the purpose of breakpoints in a JavaScript debugger? Marks : 1 Negative Marks : 0 image Answer here To stop the execution of the code permanently. To create a gap in the code that requires user input to continue. To mark a specific line of code where execution should pause for inspection. To insert additional lines of code for testing purposes.

**ChatGPT said:**

**Answer:**  
**To mark a specific line of code where execution should pause for inspection.**

**Explanation:**

* **Breakpoints** are used to **pause program execution** at a specific line so developers can inspect variables, the call stack, and the program’s state.
* They do **not** stop execution permanently, create gaps, or insert new code.

**You said:**

Multi Choice Type Question What is it called when we make a mistake in the script? Marks : 1 Negative Marks : 0 image Answer here Error Bug Mistake Debug

**ChatGPT said:**

**Answer:**  
**Bug**

**Explanation:**

* In programming, a **bug** refers to a **mistake or flaw in the code** that causes it to behave unexpectedly or incorrectly.
* An **error** is the manifestation of a bug (e.g., syntax error, runtime error).
* **Debug** is the process of finding and fixing bugs.

**You said:**

Multi Choice Type Question When catching errors using try...catch in JavaScript, which block contains the code to be executed when an error occurs? Marks : 1 Negative Marks : 0 image Answer here error catch try finally

**ChatGPT said:**

**Answer:**  
**catch**

**Explanation:**

* In a try...catch statement:
  + The **try** block contains code that might throw an error.
  + The **catch** block contains code that executes **if an error occurs** in the try block.
  + The **finally** block (optional) executes code **regardless of whether an error occurred**.

**You said:**

Multi Choice Type Question How do we debug a script? Marks : 1 Negative Marks : 0 image Answer here Use of JavaScript Validator Use of JavaScript Debugger Use of JavaScript Validator & Debugger Use of javascript interpreter

**ChatGPT said:**

**Answer:**  
**Use of JavaScript Debugger**

**Explanation:**

* A **JavaScript debugger** allows developers to **step through code, set breakpoints, and inspect variables** to find and fix issues.
* A **validator** only checks for syntax errors and coding standards; it does not provide interactive debugging.
* The interpreter executes code but does not offer debugging tools.

**You said:**

Multi Choice Type Question What does the debugger; statement do when included in your JavaScript code? Marks : 1 Negative Marks : 0 image Answer here It forcefully terminates the execution of the code. It triggers an error message and halts execution until resolved. It sets a breakpoint at that line, pausing the code when reached. It displays a log message in the console, but doesn't affect execution.

**ChatGPT said:**

**Answer:**  
**It sets a breakpoint at that line, pausing the code when reached.**

**Explanation:**

* The debugger; statement in JavaScript acts as a **programmatic breakpoint**.
* When the browser's developer tools are open, execution **pauses at that line**, allowing inspection of variables, call stack, and program state.
* It does **not** terminate code or log messages by itself.

**You said:**

Multi Choice Type Question What is the purpose of the debugger statement in JavaScript? Marks : 1 Negative Marks : 0 image Answer here It activates the browser's debugging mode, allowing step-by-step code execution. It generates detailed error logs for better troubleshooting. It displays a pop-up message with a custom error message during runtime. It highlights syntax errors in the code, making them easier to spot.

**ChatGPT said:**

**Answer:**  
**It activates the browser's debugging mode, allowing step-by-step code execution.**

**Explanation:**

* The debugger statement in JavaScript **pauses execution** at that point if developer tools are open.
* This allows developers to **inspect variables, step through code, and analyze program flow**.
* It does **not** generate logs, show pop-ups, or highlight syntax errors.

**You said:**

Multi Choice Type Question where does the browser typically display error messages during debugging? Marks : 1 Negative Marks : 0 image Answer here Bug Window Error Issues Error Window Error Console

**ChatGPT said:**

**Answer:**  
**Error Console**

**Explanation:**

* Browsers display JavaScript **error messages, warnings, and logs** in the **Error Console** (also called the **JavaScript Console**).
* This allows developers to debug issues by inspecting errors and program output.
* Options like Bug Window, Error Issues, or Error Window are incorrect.

**You said:**

Multi Choice Type Question What is the purpose of a JavaScript debugger? Marks : 1 Negative Marks : 0 image Answer here Correction of errors Placing script execution under control Correction of errors & Placing script execution under control Compilation

**ChatGPT said:**

**Answer:**  
**Placing script execution under control**

**Explanation:**

* A **JavaScript debugger** allows developers to **control the execution of scripts** by setting breakpoints, pausing code, stepping through lines, and inspecting variables.
* While it helps identify errors, the debugger itself does **not automatically correct errors**.
* Compilation is not relevant since JavaScript is an interpreted language.

**You said:**

Multi Choice Type Question What does the JavaScript debugger statement do when no debugging tools are open? Marks : 1 Negative Marks : 0 image Answer here It crashes the browser. It generates a JavaScript alert with a custom message. It is ignored, and the code runs as if the statement doesn't exist. It throws an error and halts execution.

**ChatGPT said:**

**Answer:**  
**It is ignored, and the code runs as if the statement doesn't exist.**

**Explanation:**

* If the browser’s developer tools are **not open**, the debugger; statement has **no effect**.
* The code continues to execute normally without pausing or throwing errors.

**You said:**

Multi Choice Type Question Where is the error icon option available? Marks : 1 Negative Marks : 0 image Answer here Tools Help File Edit

**ChatGPT said:**

**Answer:**  
**Tools**

**Explanation:**

* In most browsers, the **error icon** (to view or access the Error Console/JavaScript Console) is available under the **Tools** menu.
* Other menus like **File, Edit, or Help** do not provide direct access to error/debugging tools.

**You said:**

Multi Choice Type Question In the browser's developer tools, what does the "Watch" panel allow you to do? Marks : 1 Negative Marks : 0 image Answer here Watch live streams of JavaScript code being executed. Monitor the performance of asynchronous functions. Inspect and track the values of variables during code execution. Record and playback interactions with the website.

**ChatGPT said:**

**Answer:**  
**Inspect and track the values of variables during code execution.**

**Explanation:**

* The **Watch panel** in browser developer tools allows developers to **monitor specific variables or expressions** while stepping through code.
* It helps in debugging by showing how values change over time.
* It does **not** watch live streams, monitor performance directly, or record/playback website interactions.

**You said:**

Multi Choice Type Question David is reviewing a JavaScript file with several comments. He wants to ensure that the comments do not affect the execution of the code. How can David write comments in JavaScript to ensure they do not affect the execution of the code? Marks : 1 Negative Marks : 0 image Answer here By placing comments within <!-- and --> tags By writing comments between single quotes ' ' or double quotes " " By starting comments with # symbol By using /\* \*/ for single-line comments and // for multi-line comments

**ChatGPT said:**

**Answer:**  
*By using / / for single-line comments and // for multi-line comments*

**Explanation:**

* In JavaScript:
  + // is used for **single-line comments**.
  + /\* ... \*/ is used for **multi-line comments**.
* Other methods like <!-- -->, quotes, or # are **not valid JavaScript comment syntax** and can cause errors.

*Note:* Actually, // is for single-line comments, and /\* \*/ is for multi-line comments—the answer in the question is reversed, but the key point is that these two are the correct ways.

**You said:**

Multi Choice Type Question Sarah is working on a complex JavaScript function and wants to add explanatory notes for herself and other developers. What is the appropriate way to add comments in JavaScript to provide explanatory notes within the code? Marks : 1 Negative Marks : 0 image Answer here Using single quotes to enclose comments Placing comments between <comment> and </comment> tags. Using // for single-line comments and /\* \*/ for multi-line comments Wrapping comments with <!-- and --> tags

**ChatGPT said:**

**Answer:**  
*Using // for single-line comments and / / for multi-line comments*

**Explanation:**

* In JavaScript, comments are added using:
  + // for **single-line comments**.
  + /\* ... \*/ for **multi-line comments**.
* Other options like quotes, <comment> tags, or <!-- --> are **not valid** and may cause errors.

**You said:**

Multi Choice Type Question Emma is working on a team project, and she wants to temporarily disable a block of code during development for testing purposes. What type of comment can Emma use in JavaScript to temporarily disable a block of code during development? Marks : 1 Negative Marks : 0 image Answer here Multi-line comments using /\* \*/ Single-line comments using // Special comment tags <comment> and </comment> Comment tags <!-- and -->

**ChatGPT said:**

**Answer:**  
*Multi-line comments using / /*

**Explanation:**

* In JavaScript, **multi-line comments (/\* ... \*/)** can be used to **temporarily disable a block of code** without deleting it.
* Single-line comments (//) can only disable **one line at a time**.
* <comment> tags and <!-- --> are **not valid** for disabling code in JavaScript.

**You said:**

Multi Choice Type Question What is the purpose of the try...catch statement in JavaScript? Marks : 1 Negative Marks : 0 image Answer here It allows you to define custom breakpoints in the code. It helps in handling and managing errors during runtime. It enables the execution of code in a loop until a specific condition is met. It facilitates the inspection of variables and their values.

**ChatGPT said:**

**Answer:**  
**It helps in handling and managing errors during runtime.**

**Explanation:**

* The try...catch statement in JavaScript is used to **handle runtime errors** gracefully.
  + The try block contains code that might throw an error.
  + The catch block contains code to handle the error if one occurs.
* It does **not** define breakpoints, loop execution, or inspect variables.

**You said:**

Multi Choice Type Question What does the JavaScript console.clear() method do? Marks : 1 Negative Marks : 0 image Answer here Clears all breakpoints set in the code. Removes all errors from the browser's console. Clears the output in the browser's console. Resets the values of all variables to their initial state.

**ChatGPT said:**

**Answer:**  
**Clears the output in the browser's console.**

**Explanation:**

* The console.clear() method **removes all messages currently displayed in the browser’s console**, making it easier to view new logs.
* It does **not** affect breakpoints, variable values, or error history outside the console display.

**You said:**

Multi Choice Type Question ﻿Which of the following is the definition for debugging? Marks : 1 Negative Marks : 0 image Answer here Finding bugs Fixing bugs Both Finding & Fixing bugs Clearing bugs

**ChatGPT said:**

**Answer:**  
**Both Finding & Fixing bugs**

**Explanation:**

* **Debugging** is the process of **identifying (finding) and resolving (fixing) errors or bugs** in the code.
* Simply finding or clearing bugs alone does not fully define debugging.

**You said:**

Multi Choice Type Question Which type of error occurs when the JavaScript engine encounters an unexpected token or syntax? Marks : 1 Negative Marks : 0 image Answer here Runtime Error Logical Error Syntax Error Semantic Error

**ChatGPT said:**

**Answer:**  
**Syntax Error**

**Explanation:**

* A **syntax error** occurs when the JavaScript engine encounters code that **does not follow the proper syntax rules** (e.g., missing brackets, incorrect operators).
* **Runtime errors** happen during execution, **logical errors** produce incorrect results, and **semantic errors** are related to meaning but not syntax.

**You said:**

Multi Choice Type Question What is the purpose of the console.group() and console.groupEnd() methods in JavaScript debugging? Marks : 1 Negative Marks : 0 image Answer here They create a new debugging group and end an existing one, respectively. They hide specific sections of the code in the console. They start and stop the JavaScript event loop for debugging purposes. They allow you to measure the performance of functions.

**ChatGPT said:**

**Answer:**  
**They create a new debugging group and end an existing one, respectively.**

**Explanation:**

* console.group() starts a **new grouped section** in the console, allowing related logs to be **nested together**.
* console.groupEnd() **ends the group**, improving readability of complex logs.
* These methods do **not** hide code, control the event loop, or measure performance.

**You said:**

Multi Choice Type Question Sarah is working on a JavaScript project and wants to follow best coding practices. What is the recommended way to declare variables in JavaScript to adhere to best coding practices? Marks : 1 Negative Marks : 0 image Answer here Using var for all variable declarations. Using let and const for variable declarations based on their scope and mutability requirements Using const for all variable declarations to enforce immutability Declaring variables without using any specific keyword

**ChatGPT said:**

**Answer:**  
**Using let and const for variable declarations based on their scope and mutability requirements**

**Explanation:**

* Modern JavaScript best practices recommend:
  + **const** for variables that **should not be reassigned**.
  + **let** for variables that **may change value**.
* Avoid using var because it has **function scope** and can lead to unexpected behavior.
* Declaring variables without keywords creates **global variables**, which is considered bad practice.