# Randomly Selected Questions - Set 2

**Question 1 (ID: 3.8.4):** Multiple Choice: What will be the output of the following code?  
  
javascript  
Copy code  
let teams = ["Tigers", "Bisons", "Eagles", "Cobras"];  
console.log(teams.length);  
(A) 0  
(B) 2  
(C) 4  
(D) undefined

**Question 2 (ID: 4.5.1):** Multiple Choice: What must be set to make the `label` element's width adjustable?  
  
- (A) display: inline  
- (B) display: block  
- (C) display: inline-block  
- (D) width: auto

**Question 3 (ID: 1.7.5):** Multiple Choice: What does clicking a hyperlink with an `href` attribute containing `mailto:someone@example.com` do?  
 - (A) Opens a webpage at `example.com`  
 - (B) Starts an email program to send an email to `someone@example.com`  
 - (C) Downloads a file from `example.com`  
 - (D) Connects to a live chat with `someone@example.com`

**Question 4 (ID: 3.2.2):** Multiple Choice: What is the result of the following expression in JavaScript?  
let x = 5 % 2;  
- (A) 0  
- (B) 1  
- (C) 2  
- (D) 5

**Question 5 (ID: 2.4.3):** Multi-Select: Which properties are set by the shorthand `font` property? (Select all that apply)  
 - (A) font-family  
 - (B) font-size  
 - (C) font-weight  
 - (D) line-height

**Question 6 (ID: 3.9.5):** Multiple Choice: What will happen if you try to delete a property from an object?  
  
(A) The property is permanently removed.  
(B) The property value is set to null.  
(C) The object becomes undefined.  
(D) It throws an error.

**Question 7 (ID: 4.1.1):** Multiple Choice: What is the purpose of the JavaScript `Date` object?  
  
- (A) To represent a date as a string  
- (B) To represent a specific moment in time, measured in milliseconds since January 1, 1970 (Unix Epoch)  
- (C) To convert a date to a number  
- (D) To store multiple dates in an array

**Question 8 (ID: 1.8.7):** True/False: An `<a>` tag can be used as a container for both text and images.

**Question 9 (ID: 4.8.5):** Multiple Choice: What happens when you call `removeChild()` on a DOM node?  
  
- (A) It moves the child node to another parent.  
- (B) It deletes the child node from the DOM.  
- (C) It hides the child node without removing it.  
- (D) It duplicates the child node.

**Question 10 (ID: 4.4.2):** Multiple Choice: What happens when a checkbox is not selected in a form submission?  
  
- (A) The browser sends a null value.  
- (B) The browser does not send the checkbox value at all.  
- (C) The browser sends a value of "false".  
- (D) The browser sends the default value "off".

**Question 11 (ID: 4.6.6):** Multiple Choice: Which of the following methods adds an event listener to an HTML element?  
  
- (A) addEventListener()  
- (B) attachListener()  
- (C) setEvent()  
- (D) createListener()

**Question 12 (ID: 2.2.4):** Multiple Choice: How would you select an HTML element with the ID 'banner'?  
 - (A) .banner  
 - (B) #banner  
 - (C) banner  
 - (D) &banner

**Question 13 (ID: 4.9.8):** Multiple Choice: What does the `preventDefault()` method do in an event handler?  
  
- (A) It prevents the browser's default action for the event.  
- (B) It removes the event listener from the DOM.  
- (C) It triggers a default action for the event.  
- (D) It logs the event to the console.

**Question 14 (ID: 4.2.8):** Multiple Choice: What will the regex `/^ab/` match?  
  
- (A) Any string containing "ab".  
- (B) A string starting with "ab".  
- (C) A string ending with "ab".  
- (D) A string where "ab" appears anywhere.

**Question 15 (ID: 1.3.3):** True/False: Nested <p> tags are valid in HTML and do not cause any errors in document rendering.

**Question 16 (ID: 1.6.10):** True/False: The <li> element can be used outside of <ul> or <ol> elements.

**Question 17 (ID: 1.2.3):** Multiple Choice: Which tag is used to define an independent, self-contained content that could be syndicated?  
 - (A) <div>  
 - (B) <section>  
 - (C) <article>  
 - (D) <span>

**Question 18 (ID: 1.9.7):** True/False: You can use the `<th>` element within `<tbody>` to emphasize certain rows.

**Question 19 (ID: 2.2.5):** Multiple Choice: Which selector would you use to style all <p> elements within a <div>?  
 - (A) div p  
 - (B) div + p  
 - (C) div > p  
 - (D) p div

**Question 20 (ID: 1.1.7):** True/False: The subnet mask of an IPv4 address determines which part of the address represents the network and which part represents the host.

**Question 21 (ID: 3.1.2):** Multiple Choice: What is ECMAScript?  
 - (A) Another name for Java  
 - (B) A standardized version of JavaScript  
 - (C) A JavaScript framework for server-side development  
 - (D) A deprecated web programming language

**Question 22 (ID: 3.9.6):** Multiple Choice: What is the output of this code?  
  
javascript  
Copy code  
let book = {  
 title: "Quiet",  
 author: {  
 firstName: "Susan",  
 lastName: "Cain"  
 },  
 getAuthorName: function() {  
 return this.author.firstName + " " + this.author.lastName;  
 }  
};  
console.log(book.getAuthorName());  
(A) Susan Cain  
(B) Quiet  
(C) undefined  
(D) Error

**Question 23 (ID: 4.6.4):** Multi-Select: Which of the following are common methods used to interact with the DOM in JavaScript? (Select all that apply)  
  
- (A) document.getElementById()  
- (B) document.createElement()  
- (C) document.addEventListener()  
- (D) document.removeAttribute()

**Question 24 (ID: 4.8.6):** Multiple Choice: What does the `cloneNode(true)` method do in JavaScript?  
  
- (A) It creates a copy of a node and its children.  
- (B) It creates a copy of a node without its children.  
- (C) It moves a node to another part of the DOM.  
- (D) It deletes a node from the DOM.

**Question 25 (ID: 3.3.5):** Multiple Choice: Given the following code, what will be the output?  
let age = 6;   
if (age % 2 == 0) {   
 console.log("age is even");   
} else {   
 console.log("age is odd"); }   
   
if (age > 10) {   
 console.log("age is greater than 10");   
} else {   
 console.log("age is not greater than 10");   
 }  
  
- (A) "age is odd" and "age is greater than 10"  
- (B) "age is even" and "age is not greater than 10"  
- (C) "age is odd" and "age is not greater than 10"  
- (D) "age is even" and "age is greater than 10"

**Question 26 (ID: 4.8.4):** Multiple Choice: What does the `nextElementSibling` property return?  
  
- (A) The next sibling node, regardless of type  
- (B) The next element node that shares the same parent  
- (C) The last child node in the current parent  
- (D) The first child node of the parent

**Question 27 (ID: 1.2.8):** Multiple Choice: What does the 'charset' attribute in a <meta> tag specify?  
 - (A) The character encoding for the HTML document  
 - (B) The set of characters allowed in the document's comments  
 - (C) The website's character count limits  
 - (D) The character encoding for URLs within the document

**Question 28 (ID: 1.4.10):** Multiple Choice: Which statement about HTML comments is true?  
 - (A) Comments can be placed anywhere in the HTML, including within tags.  
 - (B) Comments reduce the overall performance of the webpage.  
 - (C) Comments can execute HTML code when the page loads.  
 - (D) Comments are often used to include executable code on the page.

**Question 29 (ID: 2.1.8):** Multiple Choice: Which selector would target all <p> elements inside <div> elements?  
 - (A) div p  
 - (B) div + p  
 - (C) div > p  
 - (D) p div

**Question 30 (ID: 4.11.4):** Multiple Choice: What is the purpose of the `required` attribute in HTML form input elements?  
  
- (A) To ensure that the field has a value before the form can be submitted.  
- (B) To prevent the user from modifying the input field.  
- (C) To provide a default value for the input field.  
- (D) To limit the length of the input field.

**Question 31 (ID: 3.2.1):** Multiple Choice: Which arithmetic operator in JavaScript is used for exponentiation?  
 - (A) `^`  
 - (B) `\*\*`  
 - (C) `exp()`  
 - (D) `++`

**Question 32 (ID: 4.9.7):** Multi-Select: Which of the following are valid ways to register an event handler in JavaScript? (Select all that apply)  
  
- (A) Embedding the event handler in the HTML as an attribute  
- (B) Using `addEventListener()`  
- (C) Overwriting the event property on a DOM node  
- (D) Using the CSS `event-handler` property

**Question 33 (ID: 4.10.10):** Multiple Choice: What is the purpose of the CSS Object Model (CSSOM)?  
  
- (A) To provide APIs for accessing and manipulating CSS styles via JavaScript.  
- (B) To store JavaScript functions.  
- (C) To create HTML elements.  
- (D) To validate CSS properties.

**Question 34 (ID: 4.1.3):** Multiple Choice: What is the result of the following code?  
  
let oneSecPastEpoch = new Date(1000);  
console.log(oneSecPastEpoch);  
  
- (A) Jan 1, 1970, 00:00:01 UTC  
- (B) Dec 31, 1969, 18:00:01 UTC  
- (C) Jan 1, 1970, 00:00:01 GMT-0500  
- (D) Undefined

**Question 35 (ID: 3.3.8):** Multiple Choice: What does the `else-if` structure provide that a basic `if-else` structure does not?  
- (A) It allows for more than two possible conditions to be evaluated  
- (B) It speeds up the execution of code  
- (C) It allows for a fallback condition when `else` is not enough  
- (D) It enables loops within conditionals

**Question 36 (ID: 1.1.6):** Multiple Choice: What protocol is used by a browser to retrieve the IP address of a domain name?  
 - (A) HTTPS  
 - (B) SMTP  
 - (C) DNS  
 - (D) TCP

**Question 37 (ID: 4.9.5):** Multiple Choice: What is the output of the following code?  
  
document.querySelector("#name").addEventListener("focus", function() {  
this.style.border = "1px solid green";  
});  
  
- (A) The input box is highlighted in green when focused.  
- (B) The input box disappears when focused.  
- (C) The input box changes to red when focused.  
- (D) The event is canceled when focused.

**Question 38 (ID: 4.11.1):** Multiple Choice: What is the purpose of form data validation in web development?  
  
- (A) To check that the user input is in the correct format before submitting it to the server.  
- (B) To automatically correct invalid user input.  
- (C) To prevent the form from being submitted if the server is down.  
- (D) To allow users to bypass filling out the form.

**Question 39 (ID: 4.3.6):** Multiple Choice: What is the output of the following code?  
  
<form action="https://example.com/apply" method="POST">  
 <input type="text" name="first" value="Rick">  
 <input type="text" name="last" value="Deckard">  
 <input type="submit">  
</form>  
  
- (A) The form data is sent to the server with "first=Rick&last=Deckard" in the request body.  
- (B) The form data is sent to the server with "first=Rick&last=Deckard" in the URL.  
- (C) The form data is saved to local storage.  
- (D) The form data is appended to the document body.

**Question 40 (ID: 4.5.10):** Multi-Select: Which of the following CSS properties can be applied to improve the usability of input fields in a form? (Select all that apply)  
  
- (A) padding  
- (B) border  
- (C) width  
- (D) height

**Question 41 (ID: 3.4.6):** Multi-Select: Which of the following are valid ternary operator expressions in JavaScript? (Select all that apply)  
- (A) `let x = (a > b) ? "a is larger" : "b is larger";`  
- (B) `x ? "Yes" : "No";`  
- (C) `age > 18 ? console.log("Adult") : console.log("Minor");`  
- (D) `result ? "Valid" : "Invalid";`

**Question 42 (ID: 1.4.7):** True/False: HTML comments can be used to hide scripts from browsers that do not support JavaScript.

**Question 43 (ID: 3.5.2):** Multiple Choice: What is the output of the following code?  
  
let i = 1; while (i <= 3) {   
 console.log(i); i++;   
 }   
 console.log("Done!");  
  
  
- (A) 1, 2, 3, Done!  
- (B) 1, 2, 3  
- (C) 1, 2, 3, 4, Done!  
- (D) Done!

**Question 44 (ID: 1.6.9):** Multiple Choice: What is the default list item marker for an unordered list?  
 - (A) Numbers  
 - (B) Dashes  
 - (C) Bullets  
 - (D) Squares

**Question 45 (ID: 3.2.3):** Multi-Select: Which of the following are valid arithmetic operations in JavaScript? (Select all that apply)  
- (A) `10 + 2`  
- (B) `5 \* 3`  
- (C) `8 / "4"`  
- (D) `"5" - 2`

**Question 46 (ID: 2.4.8):** Multiple Choice: If a specific font in a font-family list is not available, what happens?  
 - (A) The browser hides the text  
 - (B) The browser chooses the next available font in the list  
 - (C) The text is displayed using the default browser font  
 - (D) The browser downloads the font from the internet

**Question 47 (ID: 1.5.9):** Multiple Choice: How does the browser handle an <img> tag with conflicting width and height attributes that distort the image's natural aspect ratio?  
 - (A) The image is displayed with the specified dimensions, possibly distorted.  
 - (B) The browser adjusts the dimensions to maintain the aspect ratio.  
 - (C) The image fails to load.  
 - (D) The browser ignores the height attribute.

**Question 48 (ID: 2.2.6):** Multiple Choice: What does a descendant selector use to combine two selectors?  
 - (A) A comma (,)  
 - (B) A plus sign (+)  
 - (C) A greater than sign (>)  
 - (D) A space

**Question 49 (ID: 2.1.10):** Multiple Choice: Which property is used to create space around elements, inside of any defined borders?  
 - (A) margin  
 - (B) padding  
 - (C) border  
 - (D) width

**Question 50 (ID: 1.5.10):** True/False: The <img> tag supports both width and height attributes to control image sizing without CSS.

# Answers

**Answer to Question 1:** (C) 4

**Answer to Question 2:** (C) display: inline-block

**Answer to Question 3:** (B) Starts an email program to send an email to `someone@example.com`

**Answer to Question 4:** (B) 1

**Answer to Question 5:** (A) font-family, (B) font-size, (C) font-weight

**Answer to Question 6:** (A) The property is permanently removed.

**Answer to Question 7:** (B) To represent a specific moment in time, measured in milliseconds since January 1, 1970 (Unix Epoch)

**Answer to Question 8:** True

**Answer to Question 9:** (B) It deletes the child node from the DOM.

**Answer to Question 10:** (B) The browser does not send the checkbox value at all.

**Answer to Question 11:** (A) addEventListener()

**Answer to Question 12:** (B) #banner

**Answer to Question 13:** (A) It prevents the browser's default action for the event.

**Answer to Question 14:** (B) A string starting with "ab".

**Answer to Question 15:** False

**Answer to Question 16:** False

**Answer to Question 17:** (C) <article>

**Answer to Question 18:** True

**Answer to Question 19:** (A) div p

**Answer to Question 20:** True

**Answer to Question 21:** (B) A standardized version of JavaScript

**Answer to Question 22:** (A) Susan Cain

**Answer to Question 23:** (A) document.getElementById(), (B) document.createElement(), (C) document.addEventListener()

**Answer to Question 24:** (A) It creates a copy of a node and its children.

**Answer to Question 25:** (B) "age is even" and "age is not greater than 10"

**Answer to Question 26:** (B) The next element node that shares the same parent.

**Answer to Question 27:** (A) The character encoding for the HTML document

**Answer to Question 28:** (A) Comments can be placed anywhere in the HTML, including within tags.

**Answer to Question 29:** (A) div p

**Answer to Question 30:** (A) To ensure that the field has a value before the form can be submitted.

**Answer to Question 31:** (B) `\*\*`

**Answer to Question 32:** (A) Embedding the event handler in the HTML as an attribute, (B) Using `addEventListener()`, (C) Overwriting the event property on a DOM node

**Answer to Question 33:** (A) To provide APIs for accessing and manipulating CSS styles via JavaScript.

**Answer to Question 34:** (B) Dec 31, 1969, 18:00:01 UTC

**Answer to Question 35:** (A) It allows for more than two possible conditions to be evaluated

**Answer to Question 36:** (C) DNS

**Answer to Question 37:** (A) The input box is highlighted in green when focused.

**Answer to Question 38:** (A) To check that the user input is in the correct format before submitting it to the server.

**Answer to Question 39:** (A) The form data is sent to the server with "first=Rick&last=Deckard" in the request body.

**Answer to Question 40:** (A) padding, (B) border, (C) width, (D) height

**Answer to Question 41:** (A), (B), (C)

**Answer to Question 42:** True

**Answer to Question 43:** (A) 1, 2, 3, Done!

**Answer to Question 44:** (C) Bullets

**Answer to Question 45:** (A) `10 + 2`, (B) `5 \* 3`, (C) `8 / "4"`, (D) `"5" - 2`

**Answer to Question 46:** (B) The browser chooses the next available font in the list

**Answer to Question 47:** (A) The image is displayed with the specified dimensions, possibly distorted.

**Answer to Question 48:** (D) A space

**Answer to Question 49:** (B) padding

**Answer to Question 50:** True