# Randomly Selected Questions - Set 2

**Question 1 (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 2 (ID: 3.11.4):** Multiple Choice: What will be the output of this code?  
  
let sentence = "I love programming!";  
console.log(sentence.indexOf("love"));  
  
- (A) 0  
- (B) 2  
- (C) 5  
- (D) -1

**Question 3 (ID: 1.3.5):** True/False: Adding extra spaces within the text in an HTML document will affect the spacing between words in most web browsers.

**Question 4 (ID: 1.7.10):** True/False: Relative URLs cannot be used within the `<a>` element to link to resources within the same site.

**Question 5 (ID: 2.4.7):** Multiple Choice: What does the `font-variant` property affect?  
 - (A) The transformation of text to uppercase or lowercase  
 - (B) The embellishment of text like underlining  
 - (C) The presentation of lowercase letters as small capitals  
 - (D) The alignment of text

**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: 3.2.5):** Multiple Choice: Which of the following is the modulus (remainder) operator in JavaScript?  
- (A) `\*\*`  
- (B) `//`  
- (C) `%`  
- (D) `++`

**Question 8 (ID: 1.2.2):** Multiple Choice: What does the <link> tag primarily use within an HTML document?  
 - (A) To link JavaScript files  
 - (B) To establish connections between different HTML pages  
 - (C) To connect the document to external stylesheets  
 - (D) To embed responsive meta tags

**Question 9 (ID: 1.10.4):** Multiple Choice: Which attribute is used to disable an HTML form input field?  
 - (A) disabled  
 - (B) off  
 - (C) inactive  
 - (D) readonly

**Question 10 (ID: 1.4.1):** True/False: HTML comments are rendered in the browser and visible to the user.

**Question 11 (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 12 (ID: 3.6.9):** Multiple Choice: What will be the output of the following arrow function?  
  
let double = (x) => x \* 2;  
console.log(double(5));  
  
- (A) 5  
- (B) 10  
- (C) undefined  
- (D) An error will occur

**Question 13 (ID: 1.9.6):** Multiple Choice: Which tag is used to group the body content in an HTML table?  
 - (A) `<thead>`  
 - (B) `<tfoot>`  
 - (C) `<tbody>`  
 - (D) `<tgroup>`

**Question 14 (ID: 4.11.5):** Multiple Choice: What happens if a form input field is marked as `required` but left empty when submitting the form?  
  
- (A) The form will not submit, and the field will be highlighted as invalid.  
- (B) The form will submit with an empty value.  
- (C) The form will automatically fill in the required field.  
- (D) The form will be submitted, but a warning will be shown.

**Question 15 (ID: 1.4.7):** True/False: HTML comments can be used to hide scripts from browsers that do not support JavaScript.

**Question 16 (ID: 3.6.8):** Multiple Choice: Which statement correctly defines an arrow function that calculates the sum of two numbers?  
  
- (A) let sum = (a, b) => { return a + b; }  
- (B) let sum = a, b => return a + b;  
- (C) let sum(a, b) = a + b;  
- (D) arrow sum(a, b) => a + b;

**Question 17 (ID: 4.5.5):** Multiple Choice: What happens when you set `cursor: pointer` on a submit button?  
  
- (A) The button becomes clickable, but the pointer does not change.  
- (B) The cursor changes to a hand icon when hovering over the button.  
- (C) The button cannot be clicked.  
- (D) The button changes color on hover.

**Question 18 (ID: 3.10.3):** Multi-Select: Which of the following are valid ways to loop through an object’s properties? (Select all that apply)  
  
- (A) for (let key in object)  
- (B) for (let key of object)  
- (C) Object.keys(object).forEach()  
- (D) for (let value of Object.values(object))

**Question 19 (ID: 4.4.6):** Multiple Choice: What is sent to the server when a radio button is selected?  
  
- (A) The name and value of the selected radio button.  
- (B) Only the name of the selected radio button.  
- (C) The name of the form element.  
- (D) A boolean value.

**Question 20 (ID: 1.6.8):** True/False: The <ol> element's numbering can be changed to alphabetical or Roman numerals using the "type" attribute.

**Question 21 (ID: 3.5.8):** Multiple Choice: What does the `continue` statement do in a loop?  
  
- (A) It skips the rest of the loop body for the current iteration and jumps to the next iteration.  
- (B) It exits the loop immediately.  
- (C) It stops the loop temporarily and then resumes from where it left off.  
- (D) It restarts the loop from the beginning.

**Question 22 (ID: 4.3.5):** Multiple Choice: What does the `enctype` attribute do in a form element?  
  
- (A) It specifies how the form data should be encoded when submitted.  
- (B) It specifies the URL where the form should be submitted.  
- (C) It specifies the HTTP method to use when submitting the form.  
- (D) It formats the form data as JSON.

**Question 23 (ID: 3.4.10):** Multi-Select: Which of the following are valid switch statement structures? (Select all that apply)  
- (A) `switch (fruit) { case "apple": eat(); break; case "orange": peel(); break; }`  
- (B) `switch (num) { case 1: one(); case 2: two(); break; }`  
- (C) `switch (day) { case "Monday": rest(); break; default: work(); }`  
- (D) `switch (value) { case true: accept(); default: decline(); }`

**Question 24 (ID: 3.4.4):** Multiple Choice: What does the ternary operator allow you to do in JavaScript?  
- (A) Declare multiple variables in one statement  
- (B) Write an if-else condition in a single line  
- (C) Loop through arrays more efficiently  
- (D) Create functions without naming them

**Question 25 (ID: 1.3.2):** Multiple Choice: What is the purpose of the <p> tag in an HTML document?  
 - (A) To define a line break  
 - (B) To emphasize text  
 - (C) To create a paragraph  
 - (D) To insert an image

**Question 26 (ID: 1.2.4):** Multiple Choice: What is the function of the <nav> element?  
 - (A) To define a container for navigation links  
 - (B) To create a network of connected data  
 - (C) To mark the non-scrollable sections of a webpage  
 - (D) To navigate through the JavaScript functions in the code

**Question 27 (ID: 4.6.7):** Multiple Choice: What is the window object in JavaScript?  
  
- (A) It represents the browser's window or frame that displays the document.  
- (B) It represents an HTML element in the DOM.  
- (C) It is a method for creating pop-up windows.  
- (D) It is a method for closing a webpage.

**Question 28 (ID: 1.4.5):** True/False: Placing a comment inside an HTML tag will prevent the tag from being rendered.

**Question 29 (ID: 1.3.8):** Multiple Choice: What is the effect of multiple whitespace characters between words in HTML?  
 - (A) They add multiple spaces in the rendered document.  
 - (B) They are collapsed into a single space.  
 - (C) They create a new paragraph.  
 - (D) They are ignored by web browsers.

**Question 30 (ID: 4.4.8):** Multi-Select: Which of the following input types allow the user to select multiple options in a form? (Select all that apply)  
  
- (A) `checkbox`  
- (B) `radio`  
- (C) `select` with the `multiple` attribute  
- (D) `textarea`

**Question 31 (ID: 2.6.3):** Multi-Select: Which positioning values remove an element from the normal document flow? (Select all that apply)  
 - (A) `position: absolute;`  
 - (B) `position: relative;`  
 - (C) `position: fixed;`  
 - (D) `position: sticky;`

**Question 32 (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 33 (ID: 3.4.1):** Multiple Choice: Which of the following is considered a falsy value in JavaScript?  
 - (A) "0"  
 - (B) 1  
 - (C) 0  
 - (D) "false"

**Question 34 (ID: 4.3.1):** Multiple Choice: What is the purpose of the `action` attribute in a `<form>` element?  
  
- (A) It specifies the URL where the form data should be sent.  
- (B) It specifies the method of submitting the form (GET or POST).  
- (C) It validates the form input before submission.  
- (D) It styles the form element.

**Question 35 (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 36 (ID: 1.9.1):** True/False: The `<table>` tag is used for creating structured layouts for web pages.

**Question 37 (ID: 2.3.4):** Multiple Choice: How do you specify a background image for an element in CSS?  
 - (A) background-image: url('image.jpg');  
 - (B) background: image('image.jpg');  
 - (C) background-url: 'image.jpg';  
 - (D) bg-image: url('image.jpg');

**Question 38 (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 39 (ID: 2.5.10):** Multiple Choice: Which CSS property is used to hide elements without affecting the layout?  
 - (A) visibility: hidden;  
 - (B) display: none;  
 - (C) opacity: 0;  
 - (D) margin: 0;

**Question 40 (ID: 2.5.7):** Multiple Choice: When does margin collapsing occur?  
 - (A) When adjacent margins of floated elements combine  
 - (B) When vertical margins of block elements touch each other  
 - (C) Only when horizontal margins of inline elements combine  
 - (D) It never occurs in modern CSS

**Question 41 (ID: 1.4.9):** True/False: It is considered good practice to use comments to explain complex parts of the code.

**Question 42 (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 43 (ID: 3.8.8):** Multi-Select: Which of the following methods can be used to add elements to an array? (Select all that apply)  
  
(A) push()  
(B) unshift()  
(C) splice()  
(D) pop()  
[3.8.9] Multiple Choice: What does the splice() method do in an array?  
  
(A) It adds an element to the beginning of the array.  
(B) It removes an element from the end of the array.  
(C) It removes or adds elements from/to the array at a specific index.  
(D) It sorts the array.

**Question 44 (ID: 3.8.3):** Multi-Select: Which of the following methods can be used to remove elements from an array? (Select all that apply)  
  
(A) pop()  
(B) shift()  
(C) splice()  
(D) push()

**Question 45 (ID: 2.5.5):** Multiple Choice: What is the effect of setting the 'margin' property to 'auto'?  
 - (A) It removes the margin.  
 - (B) It maximizes the margin based on the available space.  
 - (C) It centers the element within its containing element if width is specified.  
 - (D) It minimizes the margin to zero pixels.

**Question 46 (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 47 (ID: 3.4.3):** Multi-Select: Which of the following values are considered truthy in JavaScript? (Select all that apply)  
- (A) "Hello"  
- (B) null  
- (C) 1  
- (D) 0

**Question 48 (ID: 4.7.3):** Multi-Select: Which of the following are valid DOM node types? (Select all that apply)  
  
- (A) Element node  
- (B) Attribute node  
- (C) Text node  
- (D) Document node

**Question 49 (ID: 3.6.7):** Multi-Select: Which of the following are valid function expressions in JavaScript? (Select all that apply)  
  
- (A) let add = function(a, b) { return a + b; }  
- (B) let square = function(x) { return x \* x; }  
- (C) let greet = (name) => "Hello " + name;  
- (D) let divide = (a, b) => { return a / b };

**Question 50 (ID: 3.5.5):** Multiple Choice: What is the purpose of the `break` statement in a loop?  
  
- (A) To skip to the next iteration of the loop  
- (B) To exit the loop immediately  
- (C) To stop the loop and re-enter after one iteration  
- (D) To continue the loop from the last point

# Answers

**Answer to Question 1:** (A) To check that the user input is in the correct format before submitting it to the server.

**Answer to Question 2:** (B) 2

**Answer to Question 3:** False

**Answer to Question 4:** False

**Answer to Question 5:** (C) The presentation of lowercase letters as small capitals

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

**Answer to Question 7:** (C) `%`

**Answer to Question 8:** (C) To connect the document to external stylesheets

**Answer to Question 9:** (A) disabled

**Answer to Question 10:** False

**Answer to Question 11:** (B) The browser does not send the checkbox value at all.

**Answer to Question 12:** (B) 10

**Answer to Question 13:** (C) `<tbody>`

**Answer to Question 14:** (A) The form will not submit, and the field will be highlighted as invalid.

**Answer to Question 15:** True

**Answer to Question 16:** (A) let sum = (a, b) => { return a + b; }

**Answer to Question 17:** (B) The cursor changes to a hand icon when hovering over the button.

**Answer to Question 18:** (A) for (let key in object), (C) Object.keys(object).forEach(), (D) for (let value of Object.values(object))

**Answer to Question 19:** (A) The name and value of the selected radio button.

**Answer to Question 20:** True

**Answer to Question 21:** (A) It skips the rest of the loop body for the current iteration and jumps to the next iteration.

**Answer to Question 22:** (A) It specifies how the form data should be encoded when submitted.

**Answer to Question 23:** (A), (C)

**Answer to Question 24:** (B) Write an if-else condition in a single line

**Answer to Question 25:** (C) To create a paragraph

**Answer to Question 26:** (A) To define a container for navigation links

**Answer to Question 27:** (A) It represents the browser's window or frame that displays the document.

**Answer to Question 28:** False

**Answer to Question 29:** (B) They are collapsed into a single space.

**Answer to Question 30:** (A) `checkbox`, (C) `select` with the `multiple` attribute

**Answer to Question 31:** (A) `position: absolute;`, (C) `position: fixed;`

**Answer to Question 32:** (A) div p

**Answer to Question 33:** (C) 0

**Answer to Question 34:** (A) It specifies the URL where the form data should be sent.

**Answer to Question 35:** (A) `10 + 2`, (B) `5 \* 3`, (C) `8 / "4"`, (D) `"5" - 2`

**Answer to Question 36:** False

**Answer to Question 37:** (A) background-image: url('image.jpg');

**Answer to Question 38:** (A) It allows for more than two possible conditions to be evaluated

**Answer to Question 39:** (A) visibility: hidden;

**Answer to Question 40:** (B) When vertical margins of block elements touch each other

**Answer to Question 41:** True

**Answer to Question 42:** (C) Bullets

**Answer to Question 43:** (A) push(), (B) unshift(), (C) splice()

**Answer to Question 44:** (A) pop(), (B) shift(), (C) splice()

**Answer to Question 45:** (C) It centers the element within its containing element if width is specified.

**Answer to Question 46:** (A) The input box is highlighted in green when focused.

**Answer to Question 47:** (A) "Hello", (C) 1

**Answer to Question 48:** (A) Element node, (B) Attribute node, (C) Text node, (D) Document node

**Answer to Question 49:** (A) let add = function(a, b) { return a + b; }, (B) let square = function(x) { return x \* x; }, (C) let greet = (name) => "Hello " + name;, (D) let divide = (a, b) => { return a / b; }

**Answer to Question 50:** (B) To exit the loop immediately