# Randomly Selected Questions - Set 5

**Question 1 (ID: 5.3.10):** Short Answer: What is the reason for limiting Ajax requests to the same origin from which the JavaScript was downloaded?

**Question 2 (ID: 6.1.8):** Short Answer: What is the purpose of a CSS preprocessor?

**Question 3 (ID: 7.4.8):** Short Answer: How does jQuery ensure that multiple animations on the same element are executed in sequence?

**Question 4 (ID: 5.2.8):** Multiple Choice: Which of the following is the correct JSON representation of an array?  
- (A) { "colors": "red", "blue", "green" }  
- (B) [ "red", "blue", "green" ]  
- (C) { "colors": ["red", "blue", "green"] }  
- (D) "colors": [ "red", "blue", "green" ]

**Question 5 (ID: 8.4.6):** Multiple Choice: When using Fetch API, which method is used to parse JSON-encoded songs into a JavaScript object?  
- (A) fetch.json()  
- (B) JSON.parse()  
- (C) response.json()  
- (D) stringfiy.JSON()

**Question 6 (ID: 6.2.3):** Multiple Choice: What command would you use to start the Node.js interactive shell?  
- (A) node start  
- (B) node shell  
- (C) node  
- (D) node init

**Question 7 (ID: 8.2.10):** Multiple Choice: When deleting a document based on specific conditions in Mongoose, which method would you typically use?  
- (A) Model.updateOne()  
- (B) Model.save()  
- (C) Model.deleteOne()  
- (D) Model.create()

**Question 8 (ID: 7.5.6):** Short Answer: How can you change a paragraph (`<p>`) to have its inner HTML become `<b>Bold Text</b>` using jQuery?  
- `$("p").html("<b>Bold Text</b>");`

**Question 9 (ID: 8.6.6):** Fill in the blank: The method used to install the node-fetch module to call the Weather API from an Express server is \_\_\_\_\_\_\_.  
- (A) npm install express  
- (B) npm install node-fetch  
- (C) npm fetch install

**Question 10 (ID: 8.6.5):** Multiple Choice: Which of the following is a feature of a RESTful web API?  
- (A) Uses SOAP protocol  
- (B) Returns data in JSON or XML format  
- (C) Requires a specific JavaScript library  
- (D) Operates only over FTP

**Question 11 (ID: 5.2.9):** Short Answer: How can you prevent JSON.stringify() from converting non-enumerable or function properties in an object?

**Question 12 (ID: 6.1.6):** Fill in the Blank: A \_\_\_\_\_\_\_\_\_\_ is a web application framework written in Ruby and created by David Heinemeier Hansson in 2004.

**Question 13 (ID: 7.7.2):** Multiple Choice: What is the primary format used by RESTful web APIs to return data?  
- (A) XML  
- (B) CSV  
- (C) JSON  
- (D) HTML

**Question 14 (ID: 8.4.3):** Short Answer: What status code does the Music API return upon successfully creating a new song?

**Question 15 (ID: 5.5.7):** Fill in the blank: In a `try-catch-finally` construct, the code in the \_\_\_\_\_\_\_\_\_\_ block will execute regardless of whether an exception was thrown or not.   
- finally

**Question 16 (ID: 7.7.1):** Multiple Choice: Which type of API requires registration to obtain an API key for use?  
- (A) Public API  
- (B) Third-party web API  
- (C) Internal API  
- (D) Local API

**Question 17 (ID: 7.3.7):** Short Answer: Describe what happens in JavaScript when the user clicks a button element with an associated click event handler.

**Question 18 (ID: 8.2.1):** Multiple Choice: Which module can be used in a Node.js application to simplify MongoDB operations through object data mapping (ODM)?  
- (A) express  
- (B) mongodb  
- (C) mongoose  
- (D) async

**Question 19 (ID: 8.2.9):** Short Answer: What is the purpose of the 'exec()' method when chaining queries in Mongoose?

**Question 20 (ID: 5.2.5):** Multiple Answers: Select all data types that can be represented in JSON.  
- [ ] Date  
- [X] Boolean  
- [X] Number  
- [X] String  
- [ ] Function  
- [X] Object

**Question 21 (ID: 9.3.3):** Fill in the Blank: A cryptographic hash function converts text of any length into a fixed-length sequence of characters called the \_\_\_\_\_\_\_\_\_\_.

**Question 22 (ID: 9.3.10):** Multiple Choice: Why is bcrypt preferred over older hash functions like MD5 or SHA-1 for password hashing?  
- (A) It executes quickly, allowing fast password verification  
- (B) It's slower, making it more resistant to brute force attacks  
- (C) It uses more memory, which is computationally efficient  
- (D) It generates shorter hash values that save storage space

**Question 23 (ID: 8.3.8):** Code Snippet: Given the following code, which HTTP verb will trigger this route and return a status of 201?  
```javascript  
router.post("/songs", function(req, res) {  
 console.log(req.body);  
 res.sendStatus(201);  
});  
```  
- (A) GET  
- (B) POST  
- (C) PUT  
- (D) DELETE

**Question 24 (ID: 9.1.3):** Short Answer: What is an origin in the context of web storage?

**Question 25 (ID: 8.5.8):** Fill in the Blank: The Music API uses a song resource with fields such as 'title', 'artist', 'popularity', 'releaseDate', and an array of \_\_\_\_\_\_\_.

**Question 26 (ID: 7.3.6):** Multiple Choice: What takes priority in jQuery, the shortcut method like click() or the on() method?  
- (A) Shortcut methods like click()  
- (B) on() method  
- (C) Neither, they are equally prioritized  
- (D) The order they are written in the code

**Question 27 (ID: 6.2.9):** Multiple Choice: What command generates a package.json file by asking the user a series of questions?  
- (A) npm generate  
- (B) npm init  
- (C) npm create  
- (D) npm start

**Question 28 (ID: 5.1.8):** Fill in the Blank: In the request URL https://en.wikipedia.org/wiki/World\_Wide\_Web, "wikipedia.org" is referred to as the \_\_\_\_\_\_\_\_\_\_\_\_.

**Question 29 (ID: 7.7.7):** Multiple Choice: In a JSONP request, which query string parameter indicates that the request is using JSONP?  
- (A) appid  
- (B) zip  
- (C) callback  
- (D) responseType

**Question 30 (ID: 8.6.1):** Multiple Choice: What is a third-party web API?  
- (A) An API that is privately used by an organization  
- (B) An API that is hosted entirely on a local server  
- (C) A public web API used by a web application to perform an operation  
- (D) An API that only provides HTML data

**Question 31 (ID: 5.5.9):** Multiple Choice: Which Error constructor is used when a numeric variable or parameter is outside the valid range?   
- (A) TypeError   
- (B) SyntaxError   
- (C) RangeError   
- (D) ReferenceError

**Question 32 (ID: 8.3.2):** Multiple Choice: Which HTTP request verb is used to retrieve a resource in a RESTful API?  
- (A) POST  
- (B) PUT  
- (C) GET  
- (D) DELETE

**Question 33 (ID: 9.3.7):** Short Answer: What is the purpose of using a salt in password hashing?

**Question 34 (ID: 9.3.6):** Multiple Answers: Which techniques can help protect password hashes from being cracked?  
- (A) Using a salt  
- (B) Storing passwords in plain text  
- (C) Applying a strong hash function like bcrypt  
- (D) Creating precomputed dictionary tables

**Question 35 (ID: 7.3.2):** Multiple Choice: What event does jQuery's ready() method respond to?  
- (A) When the document's stylesheets finish loading  
- (B) When the document's DOM has been fully constructed  
- (C) When the page's images have fully loaded  
- (D) When the user interacts with the form

**Question 36 (ID: 7.6.6):** Fill in the blank: When sending a GET request in jQuery, the method \_\_A\_\_ is typically used to send key/value pairs in the URL's query string.

**Question 37 (ID: 5.5.10):** Fill in the blank: In the function `caesarCipher(message, key)`, if the `key` is not an integer, a \_\_\_\_\_\_\_\_\_\_ error should be thrown.   
- TypeError

**Question 38 (ID: 9.1.4):** Fill in the Blank: The \_\_\_\_\_\_\_\_\_\_\_ object stores key/value pairs for an origin that are stored indefinitely.

**Question 39 (ID: 7.4.1):** Multiple Choice: What method is used in jQuery to modify an element's CSS properties?  
- (A) .attr()  
- (B) .html()  
- (C) .css()  
- (D) .val()

**Question 40 (ID: 6.1.2):** Short Answer: What is a front-end developer proficient in?

**Question 41 (ID: 7.5.1):** Multiple Choice: Which jQuery method is used to get or set the attribute value for a DOM element?  
- (A) css()  
- (B) html()  
- (C) text()  
- (D) attr()

**Question 42 (ID: 7.3.5):** Multiple Answers: Which of the following are examples of mouse events supported by jQuery? (Select all that apply)  
- (A) click  
- (B) keypress  
- (C) mousemove  
- (D) blur

**Question 43 (ID: 8.6.8):** Multiple Choice: What "units" parameter value would make the Weather API return temperature measurements in Fahrenheit?  
- (A) standard  
- (B) metric  
- (C) imperial

**Question 44 (ID: 8.6.9):** Code Snippet: Given the following Express server code snippet, what value would replace "APIKEY" to properly fetch weather data?  
  
```javascript  
const fetch = require("node-fetch");  
app.get("/weather", function(req, res) {  
 const zip = 90210;  
 const params = new URLSearchParams({  
 zip: zip,  
 units: "imperial",  
 appid: "APIKEY"  
});  
  
fetch("http://api.openweathermap.org/data/2.5/weather?" + params)  
 .then(response => response.json())  
 .then(data => {  
 const locals = {  
 data: data,  
 zip: zip  
 };  
 res.render("weather", locals);  
 })  
 .catch(error => console.log(error));  
});  
```  
- Answer: An actual API key obtained from OpenWeatherMap.org.

**Question 45 (ID: 6.3.7):** Multiple Answers: What are the parameters typically provided to an Express route's callback function? Choose all that apply.  
- (A) req  
- (B) res  
- (C) app  
- (D) next

**Question 46 (ID: 8.3.7):** Multiple Answers: Which of the following HTTP status codes might be returned if a PUT or DELETE request's item is not found in the database? Choose two.  
- (A) 200  
- (B) 400  
- (C) 204  
- (D) 404

**Question 47 (ID: 7.4.2):** Fill in the blank: In jQuery, the \_\_\_\_\_\_\_ method can be used to add or remove multiple CSS properties using an object literal.

**Question 48 (ID: 6.3.5):** Multiple Choice: Which method is used to make an Express server listen for incoming requests?  
- (A) app.serve()  
- (B) app.request()  
- (C) app.listen()  
- (D) app.connect()

**Question 49 (ID: 5.2.6):** Fill in the Blank: In JSON, a \_\_\_\_\_\_\_\_\_\_ is an unordered list of zero or more name/value pairs separated by commas and enclosed within braces ({}).

**Question 50 (ID: 6.1.9):** Multiple Choice: Which database is an example of a document database?  
- (A) MySQL  
- (B) MongoDB  
- (C) HBase  
- (D) Neo4j

# Answers

**Answer to Question 1:** To enhance security by preventing cross-origin attacks, which could exploit user data by making requests to unauthorized domains.

**Answer to Question 2:** A CSS preprocessor is a program that converts a CSS-like language into CSS to simplify the development of large CSS stylesheets.

**Answer to Question 3:** jQuery queues animations applied to the same element, allowing each animation to finish before the next begins.

**Answer to Question 4:** (C) { "colors": ["red", "blue", "green"] }

**Answer to Question 5:** (C) response.json()

**Answer to Question 6:** (C) node

**Answer to Question 7:** (C) Model.deleteOne()

**Answer to Question 8:** `$("p").html("<b>Bold Text</b>");`

**Answer to Question 9:** (B) npm install node-fetch

**Answer to Question 10:** (B) Returns data in JSON or XML format

**Answer to Question 11:** By not including them in the object passed to JSON.stringify(), as it only serializes enumerable properties and ignores functions.

**Answer to Question 12:** Ruby on Rails

**Answer to Question 13:** (C) JSON

**Answer to Question 14:** 201 Created

**Answer to Question 15:** finally

**Answer to Question 16:** (B) Third-party web API

**Answer to Question 17:** The buttonClicked() function executes and shows an alert dialog box.

**Answer to Question 18:** (C) mongoose

**Answer to Question 19:** The 'exec()' method in Mongoose is used to execute a query and provides a callback function that is called after the query is executed.

**Answer to Question 20:** Boolean, Number, String, Object

**Answer to Question 21:** hash digest

**Answer to Question 22:** (B) It's slower, making it more resistant to brute force attacks

**Answer to Question 23:** (B) POST

**Answer to Question 24:** An origin is a combination of scheme, hostname, and port number in a URL.

**Answer to Question 25:** genre

**Answer to Question 26:** (B) on() method

**Answer to Question 27:** (B) npm init

**Answer to Question 28:** hostname

**Answer to Question 29:** (C) callback

**Answer to Question 30:** (C) A public web API used by a web application to perform an operation

**Answer to Question 31:** (C) RangeError

**Answer to Question 32:** (C) GET

**Answer to Question 33:** The purpose of using a salt is to ensure that identical passwords generate different hash values, which makes precomputed dictionary attacks more difficult.

**Answer to Question 34:** (A) Using a salt, (C) Applying a strong hash function like bcrypt

**Answer to Question 35:** (B) When the document's DOM has been fully constructed

**Answer to Question 36:** $.get()

**Answer to Question 37:** TypeError

**Answer to Question 38:** localStorage

**Answer to Question 39:** (C) .css()

**Answer to Question 40:** A front-end developer is proficient in client-side technologies like HTML, CSS, and JavaScript.

**Answer to Question 41:** (D) attr()

**Answer to Question 42:** (A) click, (C) mousemove

**Answer to Question 43:** (C) imperial

**Answer to Question 44:** An actual API key obtained from OpenWeatherMap.org.

**Answer to Question 45:** (A) req, (B) res

**Answer to Question 46:** (B) 400, (D) 404

**Answer to Question 47:** css()

**Answer to Question 48:** (C) app.listen()

**Answer to Question 49:** Object

**Answer to Question 50:** (B) MongoDB