Which command is used to initialize a new Node.js project?

A) npm init
B) npm start
C) npm create
D) npm setup

Which function is used to handle errors in Node.js?

A) handleError()
B) try...catch
C) errorHandler()
D) catchError()

What does the path.join() method do in Node.js?

A) It merges multiple paths into a single path
B) It reads file content
C) It writes data to a file
D) It deletes a file

How do you create a new file in Node.js?

A) fs.createFile()
B) fs.newFile()
C) fs.writeFile()
D) fs.addFile()

What is the purpose of the res.json() method in Express.js?

A) To send a JSON response to the client
B) To parse JSON data from the client
C) To format response as XML
D) To redirect to another URL

What is the purpose of the node command?

A) To install Node.js
B) To execute a JavaScript file with Node.js
C) To start a web server
D) To initialize a new project

What is the primary purpose of Node.js modules?
A) To create graphical user interfaces
B) To organize and reuse code
C) To manage databases
D) To handle HTTP requests

Which method is used to export functions or variables from a Node.js module?
A) module.exports
B) exports.module
C) export
D) module.export

Which of the following best describes a client-server architecture?
Answer: A distributed system where clients request services from a central server.

What does app.use() do in Express.js?

A) It defines a new route
B) It applies middleware functions to incoming requests
C) It sets the server port
D) It sends a response to the client

The client in a client-server architecture typically:
Answer: Requests services from the server.

Which of the following is NOT a common type of client-server architecture?
Two-tier architecture. Three-tier architecture. N-tier architecture. Peer-to-peer architecture.

Which of the following protocols is commonly used in client-server communication?
HTTP FTP SMTP All of the above

A firewall is a security measure often used in client-server architecture to:
Protect the server from unauthorized access. Encrypt data transmitted between client and server. Prevent denial-of-service attacks. All of the above.

In a client-server model, who makes a request for a service?
The server The client The network Both client and server

What is the main role of a server in a client-server model?
To provide services to clients To process data locally To request services from other servers To communicate with the network

Which of the following is an example of a client in a client-server model?
A web browser A database server A mail server A network switch

What is the term for a computer that provides resources to other computers?
Server
Which of the following is NOT a common type of client-server application?
Email Online banking File sharing Word processing

When a client sends a request to a server, the first thing the server typically does is:
Process the request. Send a response. Establish a connection. Store the request data.

The part of a web server that processes incoming requests is called:
Web browser. Web application. [✓ Web server software]. Web page.

What is the term for the process of breaking down a large task into smaller subtasks that can be executed concurrently?
Load balancing. [✓ Threading.] Caching Multiplexing.

A web server can handle multiple requests simultaneously by using:
A single thread. Multiple threads. A single process. [✓ Multiple threads or processes.]

What is Node.js primarily used for?

A) Front-end development
B) [✓ Backend development]
C) Database management
D) Desktop applications

Which language is Node.js built on?

A) Python
B) [✓ JavaScript]
C) Java
D) Ruby

Which module in Node.js is used to create an HTTP server?

A) fs
B) path
C) [✓ http]
D) url

Load balancing is used to:
[✓ Distribute incoming requests across multiple servers.] Improve the speed of a single server. Increase the storage capacity of a server. Enhance security.

What does the npm command stand for?

A) [✓ Node Package Manager]
B) Node Project Manager
C) New Package Manager
D) Network Package Manager

How do you install a package using npm?

A) npm get <package-name>
B) npm download <package-name>
C) npm install <package-name>
D) npm add <package-name>

What is the purpose of the package.json file in a Node.js project?

A) To store configuration settings
B) To manage project dependencies
C) To define project structure
D) To write the application code

In Express.js, what does the app.listen() function do?

A) It creates a new route
B) It starts the server to listen for incoming requests
C) It sends a response to the client
D) It handles database connections

Which of the following methods is used to read a file in Node.js?

A) fs.readFile()
B) fs.openFile()
C) fs.loadFile()
D) fs.getFile()

How can you create a simple HTTP server in Node.js?

A) Using the fs module
B) Using the http module
C) Using the path module
D) Using the url module

Which method is used to send a response back to the client in Express.js?

A) res.send()
B) res.write()
C) res.response()
D) res.finish()

What is a middleware function in Express.js?

A) A function that handles HTTP requests
B) A function that processes data before sending a response
C) A function that manages file uploads

D) A function that creates routes

How do you import a module in Node.js?

A) import <module-name>
B) require(<module-name>)
C) load(<module-name>)
D) include(<module-name>)

Which of the following is used to handle promises rejections in Node.js?
A) .catch()
B) .fail()
C) .error()
D) .reject()
How can you handle errors thrown by synchronous code in Node.js?
A) By using try...catch blocks
B) By using process.on('error')
C) By using errorHandler()
D) By using promise.catch()

How do you handle errors in asynchronous functions in Node.js?
A) By using try...catch blocks
B) By using the error event
C) By passing errors to a callback function
D) By using the Promise object

What is the purpose of the process.on('uncaughtException') event?
A) To handle errors in asynchronous code
B) To log uncaught exceptions that occur in the application
C) To handle HTTP request errors
D) To manage module exports

How do you import a specific function from a module in Node.js?
A) const { functionName } = require('module-name');
B) import functionName from 'module-name';
C) require('module-name').functionName;
D) load('module-name', 'functionName');

What is the purpose of the exports object in a Node.js module?
A) To provide a method for importing modules
B) To define the public API of a module
C) To manage internal module dependencies
D) To handle HTTP requests

Which method is used to define a route that responds to GET requests in Express.js?

A) app.get()
B) app.post()
C) app.put()
D) app.delete()

What does the req.body object contain in an Express.js route handler?

A) URL parameters
B) Query string parameters
C) Data sent in the body of a POST request
D) HTTP headers

Which middleware function is used to parse incoming JSON request bodies in Express.js?

A) express.json()
B) express.urlencoded()
C) express.bodyParser()
D) express.text()

What is the purpose of app.use(express.static()) in an Express.js application?

A) To define a new route
B) To serve static files from a directory
C) To parse request bodies
D) To handle HTTP errors

What module do you use to handle file system operations in Node.js?

A) fs
B) file
C) system
D) path

In a Node.js HTTP server, how do you retrieve the URL of the incoming request?

A) req.url
B) req.path
C) req.endpoint
D) req.route

How do you parse query parameters from the URL in Node.js?

A) req.query
B) req.params
C) req.data
D) req.body

Which event is emitted when a client request is received in an HTTP server?

A) request
B) incoming
C) connect
D) data

In Node.js, how do you handle POST request data in an HTTP server?

A) req.body
B) req.data
C) req.params
D) req.query

How can you set HTTP headers in a Node.js HTTP response?

A) res.headers()
B) res.setHeader()
C) res.addHeader()
D) res.header()

How do you retrieve URL parameters in an Express.js application?

A) req.query
B) req.params
C) req.body
D) req.url

What method is used to send a plain text response in Express.js?

A) res.send()
B) res.text()
C) res.write()
D) res.plain()

How do you set a response status code in Express.js?

A) res.statusCode()
B) res.setStatus()
C) res.status()
D) res.setCode()

Which middleware function is used to parse URL-encoded request bodies in Express.js?

A) express.urlencoded()
B) express.json()
C) express.bodyParser()
D) express.raw()