Callbacks

1. **What is a callback function in JavaScript?**
2. **Which of the following is an example of a callback?**
3. **What is the main reason to use callback functions?**
4. **Which of the following is NOT a common use case for callbacks?**
5. **In this code, what will be logged to the console?**
6. ### Synchronous vs Asynchronous
7. **What is the difference between synchronous and asynchronous code?**
8. **What method in JavaScript allows for delayed execution of code?**
9. **Which of the following will delay execution by 2 seconds?**
10. **What is an example of an asynchronous operation in JavaScript?**
11. **What output is produced by the following code?**

Promises

12. **What does a JavaScript Promise represent?**
11. **What are the possible states of a promise?**
12. **How do you create a new Promise?**
13. **What method is used to handle a successful promise resolution?**
14. **Which method handles promise rejection?**
15. **What will the following code output?**
16. **What does .finally() do in a promise chain?**
17. **Which of these is NOT a reason to use promises?**
18. **How can you wait for multiple promises to resolve?**
19. **What does Promise.allSettled() do?**

Async and Await

20. **What does the async keyword do to a function?**
21. **How do you pause an async function until a promise is resolved?**
22. **What will be the output of the following code?**

23. **Which of the following is NOT true about async functions?**
24. **What is required to use `await`?**
25. **What will this code output?**
26. **What will be the output of this code?**
27. **What does `await` do in an async function?**
28. **What will be the output of this code?**
29. **What is a common advantage of using async/await over promise chaining?**
30. **Which of these is a correct way to handle errors in async/await?**
31. **How can you delay code execution using async/await?**
32. **What will the following code output?**
33. **What happens if you don't handle a rejected promise in async/await?**
34. **Which statement is correct about async functions?**

Chaining and Error Handling in Promises

35. **What does `.catch()` do in a promise chain?**
36. **What does `.finally()` do?**
37. **Which code correctly handles an error with async/await?**
38. **What happens if an error occurs in an async function without try...catch?**
39. **Which of the following is NOT true about promise chaining?**
40. **What will the following code output?**
41. **What is the purpose of returning a promise inside `.then()`?**

Advanced Promise Usage

42. **Which of these runs promises in parallel?**
43. **What will `Promise.any()` do?**
44. **What does `Promise.race()` do?**
45. **How would you handle multiple promises to get an array of results, handling each error individually?**
46. **What will happen with the following code?**

Mixing Callbacks, Promises, and Async/Await

47. **Which is true when mixing async/await with promise chains?**
48. **How would you refactor this callback-based code to use async/await?**
49. **What would you add to ensure this async function is handled as a promise?**
50. **Why would you convert a callback function to use async/await?**

51. **In async/await, what will happen if an error occurs?**

52. **What is the purpose of using `Promise.reject()`?**

53. **What does `Promise.resolve().then()` do?**

54. **If an async function has multiple `await` statements, how are they executed?**

55. **How would you write an async function that catches errors only when calling it?**

56. **What is the main difference between `Promise.all()` and `Promise.allSettled()`?**

57. **Which of the following is a correct way to create a promise that resolves after a delay?**

58. **How do `Promise.all()` and `Promise.race()` differ?**

59. **What will be the output of this code?**