1.Write a function that takes an array as input and returns a new array containing only the unique elements (remove duplicates).

2.Write a function that takes a nested array of numbers as input and returns a new flat array with all the numbers.

3.Build a simple to-do list that allows adding, removing, and marking tasks as completed.

4.Create a function to make an HTTP GET request to an API(https://jsonplaceholder.typicode.com/users) and display the data on the webpage in tabular form.

5.Write a program to fetch data from two different APIs

a) https://jsonplaceholder.typicode.com/users

b) https://jsonplaceholder.typicode.com/photos

and combine the results into a single response in tabular form.

6.Build a countdown timer that allows the user to set a specific time and shows the time remaining.

7. Which of the following is the correct way to declare a variable in JavaScript?

a) `variable x;`

b) `let x;`

c) `x = 10;`

d) `const x;`

Answer: b) `let x;`

8. What is the output of the following code?

console.log(typeof null);

a) "null"

b) "undefined"

c) "object"

d) "boolean"

Answer: c) "object"

9. What is the purpose of the `addEventListener` method in JavaScript?

a) To add styles to HTML elements.

b) To create new DOM elements.

c) To handle events on HTML elements.

d) To fetch data from APIs.

Answer: c) To handle events on HTML elements.

10. What is the output of the following code?

const x = 10;

if (x === "10") {

console.log("Equal");

} else {

console.log("Not Equal");

}

a) Equal

b) Not Equal

c) Error

d) Undefined

Answer: b) Not Equal

11. How do you check if a variable is an array in JavaScript?

a) `Array.isArray(myVar);`

b) `myVar.isArray();`

c) `myVar instanceof Array;`

d) `isArray(myVar);`

Answer: a) `Array.isArray(myVar);`

12. How can you add a new element to the end of an array in JavaScript?

a) `arr.add(newElement);`

b) `arr.push(newElement);`

c) `arr.append(newElement);`

d) `arr.unshift(newElement);`

Answer: b) `arr.push(newElement);`

13. What is the output of the following code?

const x = 5;

const y = 10;

console.log(`The sum of x and y is ${x + y}`);

a) The sum of x and y is 15

b) The sum of x and y is 510

c) The sum of x and y is "The sum of x and y is 15"

d) Error

Answer: a) The sum of x and y is 15

14. What is the output of the following code?

const a = [1, 2, 3];

const b = a;

b.push(4);

console.log(a);

a) [1, 2, 3]

b) [1, 2, 3, 4]

c) [4, 3, 2, 1]

d) Error

Answer: b) [1, 2, 3, 4]

15. What does the `splice()` method do for an array in JavaScript?

a) Adds elements to the beginning of an array.

b) Removes elements from an array and returns the removed items.

c) Merges two or more arrays into a single array.

d) Sorts the elements of an array.

Answer: b) Removes elements from an array and returns the removed items.

16. What is the output of the following code?

const arr1 = [1, 2, 3];

const arr2 = [...arr1, 4, 5];

console.log(arr2);

a) [1, 2, 3]

b) [1, 2, 3, 4, 5]

c) [1, 2, 3, [4, 5]]

d) [1, 2, 3, ...[4, 5]]

Answer: b) [1, 2, 3, 4, 5]

17. How can you make a shallow copy of an object using the spread operator?

a) `const copyObj = { ...originalObj };`

b) `const copyObj = Object.clone(originalObj);`

c) `const copyObj = Object.create(originalObj);`

d) `const copyObj = Object.assign({}, originalObj);`

Answer: a) `const copyObj = { ...originalObj };`

18. Which of the following is an example of using a callback function in JavaScript?

a) `const result = add(2, 3);`

b) `const data = fetchData(callbackFunction);`

c) `const sum = (a, b) => a + b;`

d) `const handleClick = () => { console.log("Button clicked!"); };`

Answer: b) `const data = fetchData(callbackFunction);`

19. Which higher-order function in JavaScript commonly uses callbacks?

a) `forEach`

b) `filter`

c) `reduce`

d) `map`

Answer: a) `forEach`

20.Consider the following code snippet:

function fetchDataFromServer(callback) {

setTimeout(() => {

const data = { id: 1, name: "John" };

callback(data);

}, 1000);

}

function displayData(data) {

console.log(data.name);

}

fetchDataFromServer(displayData);

What will be the output after one second?

a) undefined

b) "John"

c) { id: 1, name: "John" }

d) Error

Answer: b) "John"