

## Introduction to JavaScript

a) Which of the following is a valid way to declare a variable in JavaScript?

`let x = 5;`

`var y = "Hello";`

`const z = true;`

All of the above

b) What is the output of the following code?

`let x = 5;`

`let y = 10;`

`console.log(x + y);`

15

50

"510"

None of the above

c) Which statement is used to stop a loop?

`stop`

`exit`

`break`

`return`

Functions and Scope

a) What is the output of the following code?

`let x = 5;`

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```
function addFive() {  
    x = x + 5;  
    console.log(x);  
}
```

addFive();

5

10

15

Error

b) Which of the following is the correct way to declare a function in JavaScript?

function myFunction() { /\* code \*/ }

let myFunction = function() { /\* code \*/ }

const myFunction = () => { /\* code \*/ }

All of the above

c) What is the value of x after executing the following code?

let x = 10;

```
function outer() {
```

```
    let x = 20;
```

```
    function inner() {
```

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```
x = 30;  
}
```

```
inner();  
}
```

```
outer();  
console.log(x);
```

10

20

30

Error

### Arrays and Objects

a) How do you access the first element of an array called myArray?

myArray[0]

myArray.first

myArray.get(0)

myArray.length[0]

b) What is the output of the following code?

```
let person = {  
  name: "John",  
  age: 30,
```

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```
city: "New York"
```

```
};
```

```
console.log(person.age);
```

```
undefined
```

```
30
```

```
null
```

```
Error
```

c) How do you convert a JavaScript object into a JSON string?

```
JSON.stringify(obj)
```

```
obj.toJSON()
```

```
JSON.parse(obj)
```

```
obj.toString()
```

DOM Manipulation

a) Which method is used to select an HTML element with a specific ID?

```
document.getElementById()
```

```
document.querySelector()
```

```
document.getElementsByClassName()
```

```
document.getElementsByTagName()
```

b) How do you add an event listener to a button element?

```
<button id="myButton">Click me</button>
```

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```
const button = document.getElementById('myButton');
```

```
// Add event listener here
```

```
button.onclick = function() { /* code */ }
```

```
button.addEventListener('click', function() { /* code */ })
```

```
button.on('click', function() { /* code */ })
```

```
button.addEvent('click', function() { /* code */ })
```

c) What is the difference between `event.preventDefault()` and `event.stopPropagation()`?

`preventDefault()` stops the default behavior of an event, and `stopPropagation()` stops the event from bubbling up the DOM tree.

`preventDefault()` stops the event from bubbling up the DOM tree, and `stopPropagation()` stops the default behavior of an event.

They are the same function with different names.

They have no difference; they are used interchangeably.