Why Java script is single threaded?

JavaScript is primarily single-threaded. This means that it has only one main thread of execution, and code is executed sequentially, one instruction at a time. This single-threaded nature is a fundamental characteristic of JavaScript in web browsers.

However, it's important to note that JavaScript also provides mechanisms for handling asynchronous operations, such as callbacks, Promises, and async/await.

2nd definition:-

The prime definition of JavaScript claims that it is single-threaded, synchronous and blocking in nature. But interestingly, we can make it behave asynchronously based on our use cases.

**Synchronous**:

* In synchronous operations, tasks are executed one after the other in a sequential manner.
* When a synchronous task is initiated, the program will wait for it to finish before moving on to the next task.

**Asynchronous**:

* In asynchronous operations, tasks are initiated, and the program continues to execute other tasks without waiting for the initiated tasks to complete.
* Callbacks, Promises, and async/await are commonly used

In switch case statement we only use “:” after case/

We use break after each case so the execution will stop after we find a successful case because when condition is satisfied then case will become true so other cases below it will also run.

* The **spread operator** is used to split an iterable (e.g., an array) into individual elements.
* The **rest parameter** is used in function parameter lists to collect a variable number of arguments into an array.

**Only after function parenthesis we use this sign “;”**