## What is the clousere function

A closure Is a function enclosing a reference (variable) to Its outer scope. Functions can .access variables outside of their scope

Here Is a simple example where an outer function that returns an inner function has access :to a variable in the outer function

```
} ()Function outerFunction
;"Let outerFuncVar = "outside
} ()Function innerFunction
;Console.log(`The value is: ${outerFuncVar}`)
{
;()Return innerFunction
```

## What is the callback function

A JavaScript callback Is a function which is to be executed after another function has finished .execution

A more formal definition would be – Any function that is passed as an argument to another function so that It can be executed in that other function is called as a callback function

```
} ()Function myFirst
;myDisplayer("Hello")
{
} ()Function mySecond
;myDisplayer("Goodbye")
{
;()myFirst
;()mySecond
{.
```

## What is the higher order function

One such technique is using higher order functions. Higher order functions are functions that .take one or more functions as arguments, or return a function as their result

In this article, we will delve into what a higher order function is, the benefits of using them, and how to use them in practical applications

?What is a Higher Order Function

A higher order function Is a function that takes one or more functions as arguments, or .returns a function as its result

There are several different types of higher order functions like map and reduce. We will discuss these later in this tutorial. But before that let's first dive deep into what higher order .functions are

```
Callback function, passed as a parameter In the higher order function \!\!\!/\!\!\!/
```

```
}()Function callbackFunction
;Console.log('I am a callback function')
{
  higher order function //
}Function higherOrderFunction(func)
Console.log('I am higher order function')
()Func
{
;higherOrderFunction(callbackFunction)
```

# What is the higher order function components

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```

#### REACT#

How to Use Higher-Order Components in React

Valentine Gatwiri

Valentine Gatwiri

Higher-order components (HOCs) are a powerful feature of the React library. They allow you .to reuse component logic across multiple components

In React, a higher-order component is a function that takes a component as an argument and returns a new component that wraps the original component

HOCs allow you to add additional functionality to a component without modifying the component's code. For example, you can use a HOC to add authentication or routing .capabilities to a component or to apply a specific style or behavior to multiple components

HOCs can take additional arguments, which lets you customize the behavior of the HOC. This .makes them a flexible and reusable way to add functionality to your components