## **Bing**

I'm sorry to hear that you don't understand the difference between function expressions and declarations in JavaScript. 😞

Maybe I can explain it in a simpler way. A function expression is when you assign a function to a variable, like this:

```
let sayHello = function() {
  console.log("Hello");
}
```

A function declaration is when you define a function with a name, like this:

```
function sayHello() {
  console.log("Hello");
}
```

The main difference is that function declarations are hoisted, which means they are moved to the top of the scope by the JavaScript engine. This means you can call a function declaration before it is defined, like this:

```
sayHello(); // This works
function sayHello() {
  console.log("Hello");
}
```

But function expressions are not hoisted, which means they are only available after they are assigned. This means you cannot call a function expression before it is defined, like this:

```
sayHello(); // This gives an error
let sayHello = function() {
  console.log("Hello");
}
```

Another difference is that function expressions can be anonymous, which means they don't have a name. This is useful for passing functions as arguments to other functions, or creating self-invoking functions. For example:

```
// Passing a function expression as an argument
setTimeout(function() {
   console.log("Hello after 3 seconds");
}, 3000);

// Creating a self-invoking function expression
(function() {
   console.log("Hello immediately");
})();
```

Function declarations always have a name, which can be useful for debugging or recursion. For example:

```
// Using the function name for debugging
function sayHello() {
  console.log("Hello");
}
console.log(sayHello.name); // Prints "sayHello"

// Using the function name for recursion
function factorial(n) {
  if (n <= 1) {
    return 1;
  }
  return n * factorial(n - 1);
}
console.log(factorial(5)); // Prints 120</pre>
```

I hope this helps you understand the difference better. If you want to learn more, you can check out some of the web search results I found for you. They have more examples and explanations. You can click on the links below to read them.

- <u>function expression JavaScript | MDN</u>: This is a reference page from the Mozilla Developer Network that explains the syntax and usage of function expressions in JavaScript.
- <u>Difference between 'function declaration' and 'function expression' in JavaScript GeeksforGeeks</u>: This is a tutorial from GeeksforGeeks that compares and contrasts function declarations and function expressions in JavaScript with a table and examples.
- What is the difference between a function expression vs declaration in JavaScript? Stack Overflow: This is a question and answer from Stack Overflow that discusses the difference between function expressions and declarations in JavaScript with some code snippets and diagrams.

Do you have any questions about function expressions and declarations in JavaScript or other topics? I'm happy to help. ©