

# Difference Between JavaScript and Python

In this article, TipsMake.com will take you through the main differences between Python and JavaScript.

JavaScript and Python are two extremely popular programming languages and are very favored by programmers. If you want to become a programmer, learning Python and JavaScript will definitely change your life.

In this article, TipsMake.com will take you through the main differences between Python and JavaScript. These two languages are both widely used and quite powerful, but they have significant differences. We will go into detail in the article below:

## What is Python?

Python is such a powerful and flexible programming language that it has become an indispensable tool in the development of scientific applications worldwide. It is a general purpose programming language that can accommodate many different programming paradigms. Data science, artificial intelligence, machine learning, computer science education, machine vision, image processing, medicine, biology, and even astronomy all use it.

It is also used to build websites. This is also where we can start comparing its applications with those of JavaScript. Python is used in back-end development, which is a part of web development that creates elements that are not visible to the user, such as the server side of an application.

## Using Python

Python is a simple to use, interpreter-based high-level programming language. A Python program is also very easy to understand. Python is an object-oriented programming language that supports many different programming paradigms, including structured and functional programming as discussed in the previous section. As a result, it can be used to create a complete software. Contract programming and logic programming are also supported but only through the use of extensions.

Python can also be used as a scripting language. In fact, when it comes to client-side programming, Python is widely used. In a nutshell, Python allows us to create both simple and complex applications using a variety of programming methods.



## What is JavaScript?

While Python can be used to create the back-end of the website, JavaScript is used to create both the back-end and the front-end of the website. The front-end of an application is the part that the user sees and interacts with. JavaScript is also used behind the scenes whenever you see or interact with a website or web application.

Similarly, you can use JavaScript when interacting with mobile apps because other frameworks like React Native allow us to create apps that adapt to different devices. Since JavaScript is a powerful language that provides us with the necessary tools for building web application components, it is often used in web development.

## Using JavaScript

JavaScript is such a popular scripting language that a developer can be considered useless without knowing it. It is mainly used for client-side scripting.

The advent of JavaScript ushered in a new era of interactive web pages. If you are familiar with HTML, you know that HTML is used to display static content on a web page and CSS is used to style the web page. But on the other hand, JavaScript allows us to create interactive web pages.

Therefore, it is often used to create dynamic web pages. We can accept and validate user input with it. Features such as drop-down menus, hover actions, animations, and other web page elements can be used to create dynamic web content using JavaScript. It was originally designed for front-end development but now it is also used for back-end development.

## Difference Between JavaScript and Python

Python	JavaScript
It is an object-oriented high-level programming language	JS, or JavaScript, is a scripting language
Guido van Rossum is the creator of Python	Brendan Eich (Netscape) created JavaScript and it is now maintained by ECMA

Python makes it easier to read and maintain code	Due to its flexibility, JavaScript does not provide easy code readability and maintenance
To run Python code, you almost always need an interpreter	The ability to run JavaScript code built-in in most browsers
Python is commonly used for server-side application programming	JavaScript is commonly used for client-side application programming
By default, Python is encoded as ASCII	JavaScript encodes as UTF-16

## Difference between Python and JavaScript: Code

Consider the following code snippets, one is written in JavaScript and the other is written in Python. The for loop is used in this code to print a range of values:

```

Python Code

Lang = ['Python', 'Javascript', 'PHP']
for i in range(len(Lang)):
    print(Lang[i])

Javascript Code

const Lang = ['apple', 'banana', 'orange'];
for (let i = 0; i < Lang.length; i++) {

```

## Conclude

There is not much difference between JavaScript and Python. The reason is that since both Python and JavaScript have features like lexical scoping, object-oriented programming, function interpretation, and imperative, you can do practically anything with them. Besides, both languages have a lot of libraries and extensions to help you get the functionality you need.

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