

# Scripting Languages vs Programming Languages vs Markup

## Scripting Languages?

Scripting languages can perform different actions within a particular runtime environment, such as automating task execution, enhancing the functionality of the parent software, performing configurations, extracting data from data sets, and others

## Platform-Specific vs Platform-Agnostic

Scripting languages are platform-specific, while programming languages are platform-agnostic (cross-platform) as they have the ability to execute themselves. For instance, you can run a Java program on any operating system.

## (Mostly) Interpreted vs Compiled

While programming languages are compiled, scripting languages are mostly interpreted — even though there are some scripting languages that are both compiled and interpreted, such as Python and Groovy.

**‘Compiled’ means that a programming language has its own compiler that translates the syntax into machine code before runtime.**

**In contrast, scripting languages are interpreted line by line during runtime by the interpreter of the platform they are running on.**

## Faster vs Slower at Runtime

Because of this difference in implementation, programming languages run faster than scripting languages as they don’t have to be compiled in real-time

# More vs Less Code-Intensive

Programming languages are more code-intensive as you have to do many things manually that are handled by the platform in the case of scripting languages

Scripting languages	Programming languages
Platform-specific	Platform-agnostic (cross-platform)
(Mostly) interpreted	Compiled
Slower at runtime	Faster at runtime
Less code-intensive	More code-intensive
Creates apps as part of a stack	Creates standalone apps

## Markup language

refers to a text-encoding system consisting of a set of symbols inserted in a text document to control its structure, formatting, or the relationship between its parts

for example [XML](#)

the widely used [HTML](#)