1. **To read:**
   1. [**https://stackoverflow.com/questions/1517582/what-is-the-difference-between-statically-typed-and-dynamically-typed-languages**](https://stackoverflow.com/questions/1517582/what-is-the-difference-between-statically-typed-and-dynamically-typed-languages)

**Solution:**

### Statically typed languages

A language is statically typed if the type of a variable is known at compile time. For some languages this means that you as the programmer must specify what type each variable is. The main advantage here is that all kinds of checking can be done by the compiler, and therefore a lot of trivial bugs are caught at a very early stage.

Examples: C, C++, Java, Rust, Go, Scala

**Dynamically typed languages**

A language is dynamically typed if the type is associated with run-time values, and not named variables. This means that you as a programmer can write a little quicker because you do not have to specify types every time.

Examples: Perl, Ruby, Python, PHP, JavaScript, Erlang

* + 1. [**https://stackoverflow.com/questions/17253545/scripting-language-vs-programming-language**](https://stackoverflow.com/questions/17253545/scripting-language-vs-programming-language)

**Solution:**

Scripting languages are programming languages that don't require an explicit compilation step.

For example, in the normal case, you have to compile a C program before you can run it. But in the normal case, you don't have to compile a JavaScript program before you run it. So JavaScript is sometimes called a "scripting" language.

Also note that whether a language is a "scripting" language or not can be more about the environment than the language. There's no reason you can't write a C interpreter and use it as a scripting language. There's also no reason you can't compile JavaScript to machine code and store that in an executable file. The language Ruby is a good example of this: The original implementation was entirely interpreted, but there are now multiple compilers for it.

Examples: Lua, JavaScript, VBScript and VBA, Perl