# Differences

## 1. Framework vs Library

• Framework: A framework provides a complete structure and controls the flow of the application. You follow its rules, and it calls your code when needed. Example: Angular, Django.  
• Library: A library provides reusable functions or tools that you can call whenever you want. You control the flow of your program. Example: React, jQuery.

## 2. Compiler vs Preprocessor

• Compiler: Translates the entire source code into machine code or bytecode so the computer can execute it. It checks for errors and optimizes code during this process.  
• Preprocessor: Runs before the compiler and handles directives like macros, imports, or variable definitions. It prepares the code for the compiler.

## 3. TypeScript vs JavaScript

• TypeScript: A superset of JavaScript that adds static typing and other features. It needs to be compiled into JavaScript before running.  
• JavaScript: A dynamically typed scripting language that runs directly in browsers or servers without compilation.