



## Code Runner

**Jun Han** | 37,994,267 installs | ★★★★★ (283) | Free | Sponsor

Run C, C++, Java, JS, PHP, Python, Perl, Ruby, Go, Lua, Groovy, PowerShell, CMD, BASH, F#, Ruby, Go, Lua, Groovy, PowerShell, BAT/CMD, BASH/SH, F# Script, F# (.NET Core), C# Script, C# (.NET Core), VBScript, TypeScript, CoffeeScript, Scala, Swift, Julia, Crystal, OCaml, R, AppleScript, Elixir, VB.NET, Clojure, Haxe, Objective-C, Rust, Racket, Scheme, AutoHotkey, AutoIt, Kotlin, Dart, Pascal, Haskell, Nim,

### Installation

Launch VS Code Quick Open (Ctrl+P), paste the following command, and press enter.

ext install formulahendry.code-runner

Copy

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[Overview](#) | [Version History](#) | [Q & A](#) | [Rating & Review](#)

## Code Runner

chat on [gitter](#) | [downloads](#) **83k** | [rating](#) **4.4/5 (283)** | CI | [no status](#)

Run code snippet or code file for multiple languages: **C, C++, Java, JavaScript, PHP, Python, Perl, Perl 6, Ruby, Go, Lua, Groovy, PowerShell, BAT/CMD, BASH/SH, F# Script, F# (.NET Core), C# Script, C# (.NET Core), VBScript, TypeScript, CoffeeScript, Scala, Swift, Julia, Crystal, OCaml Script, R, AppleScript, Elixir, Visual Basic .NET, Clojure, Haxe, Objective-C, Rust, Racket, Scheme, AutoHotkey, AutoIt, Kotlin, Dart, Free Pascal, Haskell, Nim, D, Lisp, Kit, V, SCSS, Sass, CUDA, Less, Fortran, Ring, Standard ML, Zig, Mojo, Erlang, SPWN, Pkl, Gleam**, and custom command

## Book for VS Code

[《Visual Studio Code 权威指南》](#)：带你深入浅出 VS Code!



## WeChat Official Account

VS Code 的热门文章、使用技巧、插件推荐、插件开发攻略等，请关注“[玩转VS Code](#)”公众号！



## Donation

If you like this extension, you could become a backer or sponsor via [Patreon](#), donate via [PayPal](#), or scan below QR code to donate via **Alipay**. Any amount is welcome. It will encourage me to make this extension better and better!



## Features

- Run code file of current active Text Editor
- Run code file through context menu of file explorer
- Run selected code snippet in Text Editor
- Run code per Shebang
- Run code per filename glob
- Run custom command
- Stop code running
- View output in Output Window
- Set default language to run
- Select language to run
- Support REPL by running code in Integrated Terminal

## Usages

- To run code:
  - use shortcut Ctrl+Alt+N
  - or press F1 and then select/type Run Code,
  - or right click the Text Editor and then click Run Code in editor context menu
  - or click Run Code button in editor title menu
  - or click Run Code button in context menu of file explorer
- To stop the running code:
  - use shortcut Ctrl+Alt+M
  - or press F1 and then select/type Stop Code Run
  - or click Stop Code Run button in editor title menu
  - or right click the Output Channel and then click Stop Code Run in context menu



- To select language to run, use shortcut Ctrl+Alt+J, or press F1 and then select/type Run By Language, then type or select the language to run: e.g php, javascript, bat, shellscript...



- To run custom command, then use shortcut Ctrl+Alt+K, or press F1 and then select/type Run Custom Command

## Configuration

Make sure the executor PATH of each language is set in the environment variable. You could also add entry into code-runner.executorMap to set the executor PATH. e.g. To set the executor PATH for ruby, php and html:

```
{
  "code-runner.executorMap": {
    "javascript": "node",
    "php": "C:\\php\\php.exe",
    "python": "python",
    "perl": "perl",
    "ruby": "C:\\Ruby23-x64\\bin\\ruby.exe",
    "go": "go run",
    "html": "C:\\Program Files (x86)\\Google\\Chrome\\Application\\chrome.exe\"",
    "java": "cd $dir && javac $fileName && java $fileNameWithoutExt",
    "c": "cd $dir && gcc $fileName -o $fileNameWithoutExt && $dir$fileNameWithoutExt"
  }
}
```

### Supported customized parameters

- \$workspaceRoot: The path of the folder opened in VS Code
- \$dir: The directory of the code file being run
- \$dirWithoutTrailingSlash: The directory of the code file being run without a trailing slash
- \$fullFileName: The full name of the code file being run
- \$fileName: The base name of the code file being run, that is the file without the directory
- \$fileNameWithoutExt: The base name of the code file being run without its extension
- \$driveLetter: The drive letter of the code file being run (Windows only)
- \$pythonPath: The path of Python interpreter (set by Python: Select Interpreter command)

### Please take care of the back slash and the space in file path of the executor

- Back slash: please use \\
- If there are spaces in file path, please use \" to surround your file path

You could set the executor per filename [glob](#):

```
{
  "code-runner.executorMapByGlob": {
    "pom.xml": "cd $dir && mvn clean package",
    "**.test.js": "tap",
    "**.js": "node"
  }
}
```

Besides, you could set the default language to run:

```
{
  "code-runner.defaultLanguage": "javascript"
}
```

**For the default language:** It should be set with language id defined in [VS Code](#). The languages you could set are java, c, cpp, javascript, php, python, perl, ruby, go, lua, groovy, powershell, bat, shellscript, fsharp, csharp, vbscript, typescript, coffeescript, swift, r, clojure, haxe, objective-c, rust, racket, ahk, autoit, kotlin, dart, pascal, haskell, nim, d, lisp

Also, you could set the executor per file extension:

```
{
  "code-runner.executorMapByFileExtension": {
    ".vbs": "cscript //nologo"
  }
}
```

To set the custom command to run:

```
{
  "code-runner.customCommand": "echo Hello"
}
```

To set the the working directory:

```
{
  "code-runner.cwd": "path/to/working/directory"
}
```

To set whether to clear previous output before each run (default is false):

```
{
  "code-runner.clearPreviousOutput": false
}
```

To set whether to save all files before running (default is false):

```
{
  "code-runner.saveAllFilesBeforeRun": false
}
```

To set whether to save the current file before running (default is false):

```
{
  "code-runner.saveFileBeforeRun": false
}
```

To set whether to show extra execution message like [Running] ... and [Done] ... (default is true):

```
{
  "code-runner.showExecutionMessage": true
}
```

**[REPL support]** To set whether to run code in Integrated Terminal (only support to run whole file in Integrated Terminal, neither untitled file nor code snippet) (default is false):

```
{
  "code-runner.runInTerminal": false
}
```

To set whether to preserve focus on code editor after code run is triggered (default is true, the code editor will keep focus; when it is false, Terminal or Output Channel will take focus):

```
{
  "code-runner.preserveFocus": true
}
```

code-runner.ignoreSelection: Whether to ignore selection to always run entire file. (Default is **false**)

code-runner.showRunIconInEditorTitleMenu: Whether to show 'Run Code' icon in editor title menu. (Default is **true**)

code-runner.showRunCommandInEditorContextMenu: Whether to show 'Run Code' command in editor context menu. (Default is **true**)

code-runner.showRunCommandInExplorerContextMenu: Whether to show 'Run Code' command in explorer context menu. (Default is **true**)

code-runner.showStopIconInEditorTitleMenu: Whether to show 'Stop Code Run' icon in editor title menu when code is running. (Default is **true**)

code-runner.terminalRoot: For Windows system, replaces the Windows style drive letter in the command with a Unix style root when using a custom shell as the terminal, like Bash or Cgywin. Example: Setting this to /mnt/ will replace C:\path with /mnt/c/path (Default is "")

code-runner.tmporaryFileName: Temporary file name used in running selected code snippet. When it is set as empty, the file name will be random. (Default is **tempCodeRunnerFile**)

code-runner.respectShebang: Whether to respect Shebang to run code. (Default is **true**)

## About CWD Setting (current working directory)

1. By default, use the code-runner.cwd setting
2. If code-runner.cwd is not set and code-runner.fileDirectoryAsCwd is true, use the directory of the file to be executed
3. If code-runner.cwd is not set and code-runner.fileDirectoryAsCwd is false, use the path of root folder that is open in VS Code
4. If no folder is open, use the os temp folder

## Note

- For Objective-C, it is only supported on macOS
- To run C# script, you need to install [scripts](#)
- To run TypeScript, you need to install [ts-node](#)
- To run Clojure, you need to install [lein-gen](#) and [lein-exec](#)

## Telemetry data

By default, telemetry data collection is turned on to understand user behavior to improve this extension. To disable it, update the settings.json as below:

```
{
  "code-runner.enableAppInsights": false
}
```

## Change Log

See Change Log [here](#)

## Issues

Submit the [issues](#) if you find any bug or have any suggestion.

## Contribution

Fork the [repo](#) and submit pull requests.

## Categories

Programming Languages

## Tags

c# c++ code-runner-output erlang haskell  
java javascript keybindings multi-root ready  
perl php powershell python ruby rust

## Works with

Universal

## Resources

[Issues](#)  
[Repository](#)  
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[Changelog](#)

## Project Details

[formulahendry/vscode-code-runner](#)

[Last Commit: 2 years ago](#)

[30 Pull Requests](#)

[696 Open Issues](#)

## More Info

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