

# Installation Guide for win\_flex\_bison, MinGW, Chocolatey, and Make

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## A) Install win\_flex\_bison and add to PATH

1. Download win\_flex\_bison from:  
<https://github.com/lexxmark/winflexbison/releases>  
(choose win\_flex\_bison-2.5.25.zip).
2. Extract the ZIP file to a permanent folder, e.g., C:\Tools\win\_flex\_bison.
3. Rename executables inside the folder:
  - win\_bison.exe → bison.exe
  - win\_flex.exe → flex.exe
4. Add folder to PATH:
  - Open Environment Variables → Edit system variables → Path → New → Add:  
C:\Tools\win\_flex\_bison.

## B) Install MinGW (GCC/G++), select packages, and add to PATH

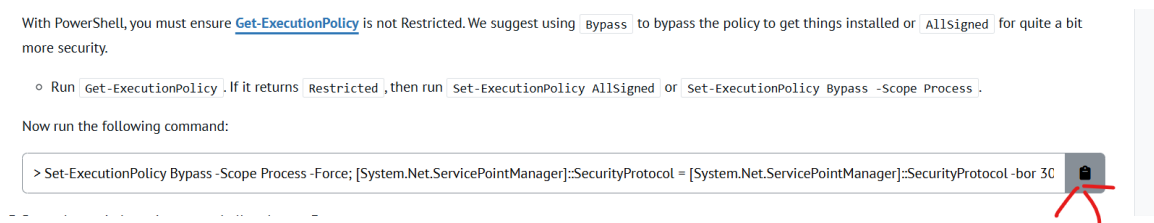
5. Download MinGW installer from:  
<https://sourceforge.net/projects/mingw/files/latest/download?source=files>.
6. Run mingw-get-setup.exe and install in C:\MinGW.
7. Open MinGW Installation Manager and under Basic Setup, mark the following packages for installation:
  - mingw-developer-toolkit
  - mingw32-base
  - mingw32-gcc-g++
  - mingw32-libpdcurses
  - (Optional) mingw32-gcc-object.
8. Go to Installation → Apply Changes → Apply.
9. Add MinGW paths to PATH:
  - C:\MinGW\bin
  - C:\MinGW\msys\1.0\bin
10. Verify GCC in cmd:  
gcc --version  
g++ --version

## C) Install Chocolatey and make, then verify

Click following link:

<https://chocolatey.org/install>

then scroll down. You will a command like given:



11. Open PowerShell as Administrator.
12. Run the copied command:
13. Open a new PowerShell and verify Chocolatey:  
`choco -v`
14. Install make:  
`choco install make -y`
15. Verify make in cmd:  
`make --version`

## Quick Troubleshooting

16. - If gcc or make is not recognized, reopen the terminal after editing PATH.
17. - Use the command: `where gcc` and `where make` to confirm installation.
18. - Make sure to use `--version` (two hyphens), not `-version`.