

## 1. Choose between a) `vscode` b) `visual studio`

- i. `vscode` :- *lightweight, (i'd say faster & simpler),*
  - a. You can do basically anything, thanks to extensions
- ii. `visual studio` :- *big, doesn't look cool, strong, nice debugger, (but lacks good extensions)*
  - a. only good for big projects
  - b. i wouldn't use before my project has hundreds of files
- iii. `C++ compiler` :-
  - a. Linux:- GNU C / C++ Compilers
  - b. Mac:- Clang / LLVM
  - c. Intel:- Intel C++ Compiler
  - d. IBM:- IBM C++ Compiler
  - e. Texas Instruments:- Their own C++ Compiler duuh 😏
    - They make calculators haha
  - f. Windows:- Microsoft Visual C++ compiler/package
    - comes with two thingies
    - `visual studio`
    - `visual studio build tools`
    - both are separate & can co-exist in a windows/OS/system
    - `vscode` can use either of those two.
    - `vscode` can even use `msys64 mingw-w64`
  - g. On windows, you don't "Have To" grab `visual studio` / `build tools`
    - there is one other way
    - i.e.
    - `msys64 mingw-w64`
    - <https://www.msys2.org/>
  - h. if you plan to have both `vscode` & `visual studio`
    - you wouldn't need to install `visual studio build tools` separately
    - instead while installing `visual studio` grab `C++ Development` + `Windows SDK` ~

## 2. Grabbing `visual studio`

- i. <https://visualstudio.microsoft.com/downloads/>
- ii. you will see `visual studio` @ the top part of the webpage
- iii. choose `C++ Development`, `Windows SDK` when installing
  - a. this will install the `C++ Compiler & Stuffs`, windows people calls it `Microsoft Visual C++ compiler/package`
  - b. you don't need `visual studio build tools` simultaneously along with it

## 3. Grabbing `vscode`

- i. <https://code.visualstudio.com/download>
- ii. now we need `C++ Compiler`
  - a. `option-1` :- grab the `build tools` from the end of this page
    - <https://visualstudio.microsoft.com/downloads/?q=build+tools>
  - b. `option-2` :- the `msys64` --> `mingw-w64` [package]
    - it contains the [gnu] c++ compiler, built for windows 😊
    - <https://www.msys2.org/>
  - c. `option-3` :- grabbing `visual studio` with `C++ Dev` + `Windows SDK`
- iii. now we need some `vscode extensions` 😊
  - a. i.e. extra features made by the community
    - remember:- these features can be really really powerfull 😊
  - b. extension [ms-vscode.cmake-tools](#)
  - c. extension [twxs.cmake](#)
  - d. extension [ms-vscode.cpptools](#)
  - e. restart VSCode