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## ATAD | Software, Alternative Methods

These options should be used if you have exhausted the methods described in the [Software.pdf](#) document, namely for Windows and, particularly, MacOS.

They are presented in preferred order:

1. Virtual Machine (works on all OS environments), or;
2. VS Code and MinGW (only for school workstations).

### 1 | Virtual Machine

Using a virtual machine will give you a virtualized Linux operating system (guest) on your main operating system (host).

This solution may be heavier on resources than the previous method.

1. Follow the instructions from [here](#).
2. Follow the instructions from [Software.pdf](#), starting at step 6 of “Manual installation (Windows/WSL or Linux)”.

The **Shared Folders** functionality is highly advised, allowing you to keep all your projects in your main operating system (host) filesystem.

### 2 | VS Code and MinGW

This is the last option, since you'll not be able to work the necessary development methodology, IDE and testing. **You'll be left working without:**

- *Valgrind*;
- *Doxygen*, and;
- *TUI mode* (GDB).

However, **it will be the option reserved for the school workstations to perform the assignments**, if you don't have a personal laptop.

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This is because WSL requires individual image installation for each student account and the school computers simply don't have the necessary disk space to accommodate multiple installations.

## Program Template

If you, for any reason, use this method to obtain a development environment, then you must use the VS Code project structure of the **CProgram\_Template\_MinGW**, made available to you.

## Installation

### Useful Links:

- Installation and usage (youtube): [Link](#)
- MinGW Installer: [Link](#)

Perform the following steps:

1. Run the **MinGW installer** through the provided link;
2. Set **C:\MinGW** as the installation directory (pre-defined). This will be important for the subsequent configuration of VS Code;
3. In the package selection step, just select the **mingw32-base** package;
4. Choose the menu option **Installation > Apply**.
5. The path to the MinGW binaries must be recognized by Windows. To do this, search for the program "Environment Variables" in the Windows **Start** menu (example - minute **15:40** of the youtube video);
6. Edit the **Path** to include the **C:\MinGW\bin** folder;

## Author and support

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You should ask your PL teacher for any help regarding these contents and procedures.