

Cyclone Visual Studio Code extension — User Manual

Cyclone is a programming language that is designed to find a solution to graph-based problems. Cyclone allows users to specify a graphical structure, set goals and conditions to be met. Cyclone can be used for program verification, testing, graph searching, hybrid automata, model checking, etc.

Cyclone files have .cyclone extension.

Cyclone Visual Studio Code extension provides declarative language features (syntax highlighting, bracket matching, bracket auto closing and bracket auto surrounding, comment toggling), has functionality to compile and run Cyclone files and return an output, and integrated into VS Code native interface.

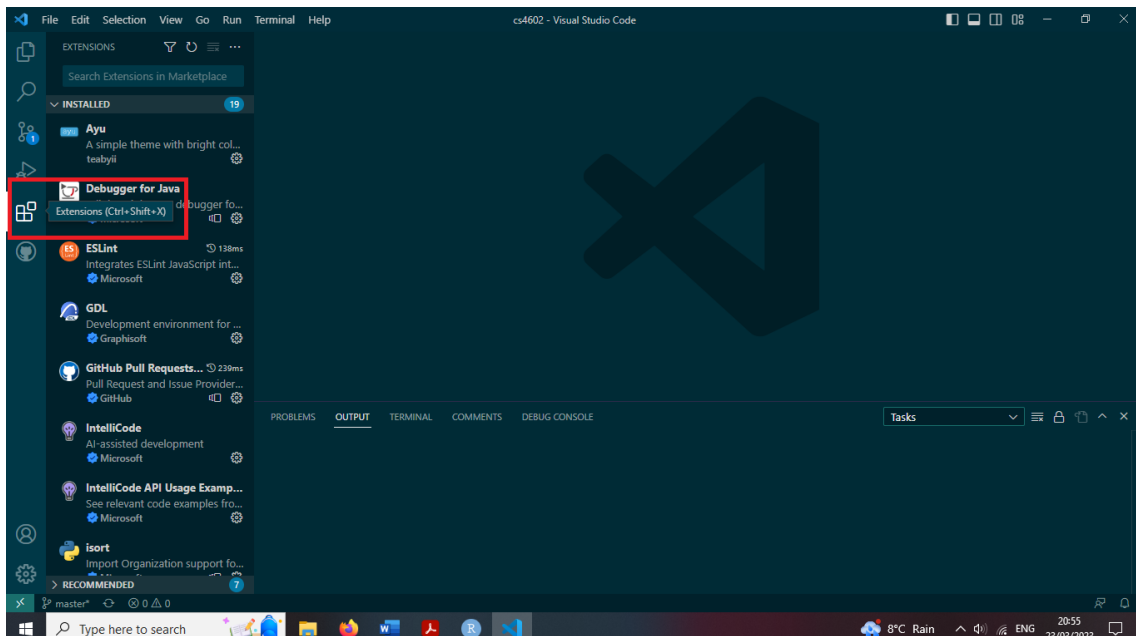
Requirements

To be able to use VS Code extension, make sure your computer meets the following requirements:

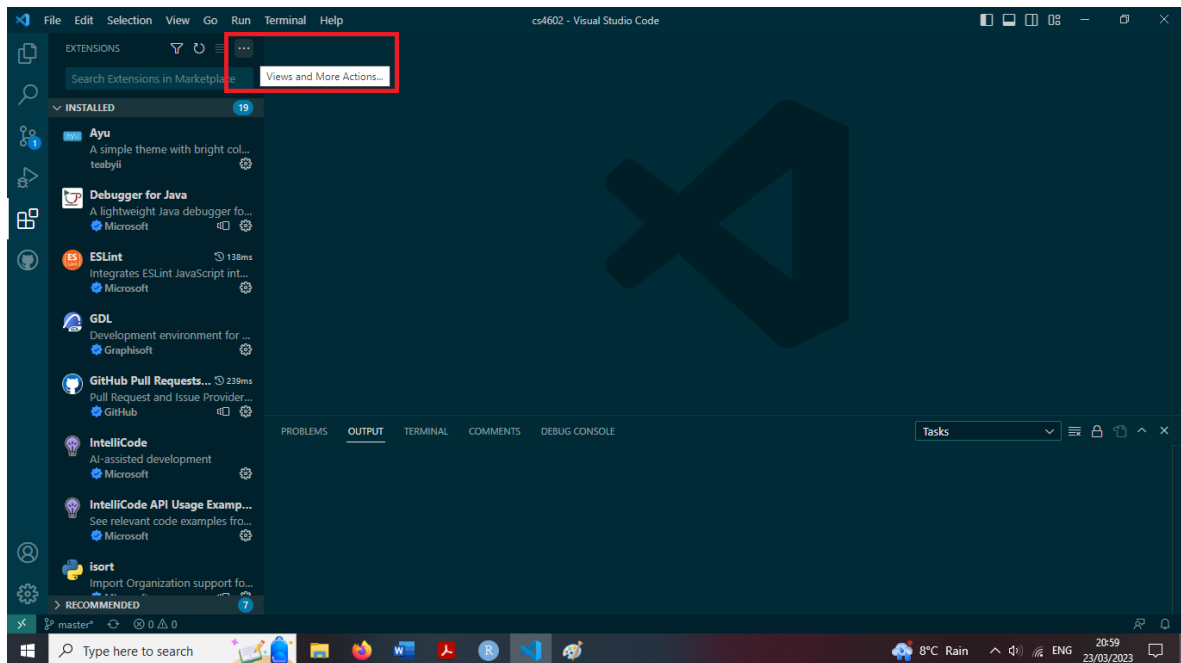
- Windows or MacOS
- Visual Studio Code
- Java

Installation

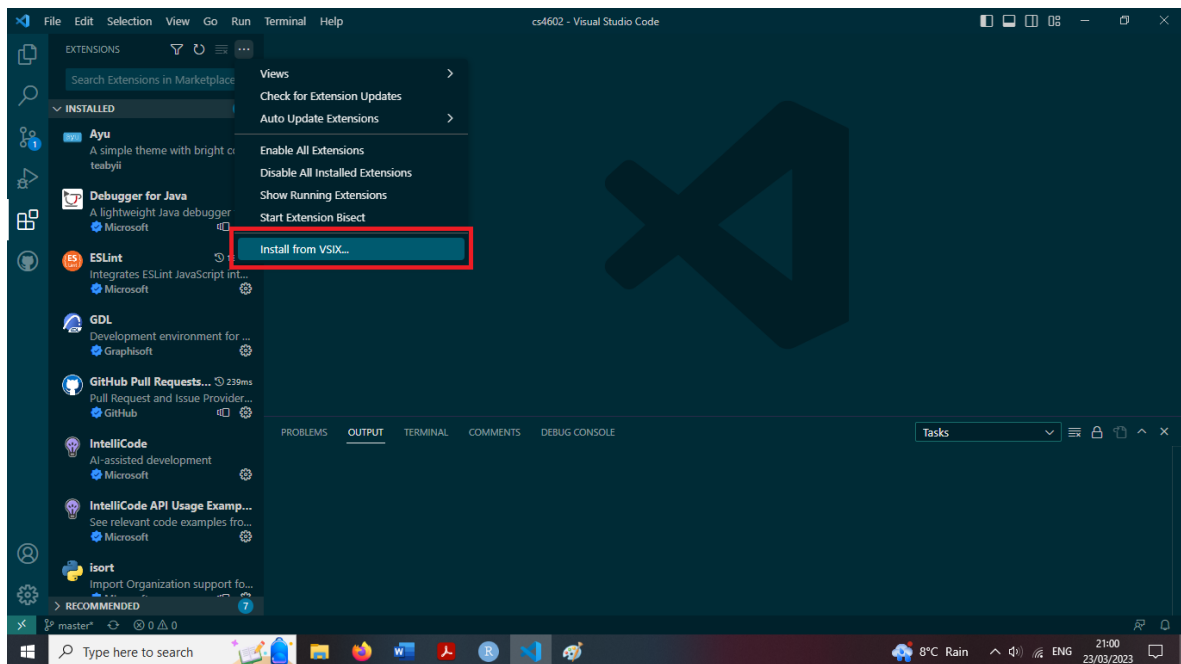
1. Download cyclone-0.0.8.vsix.
2. Open Visual Studio Code.
3. Open *Extensions* tab on the left panel.



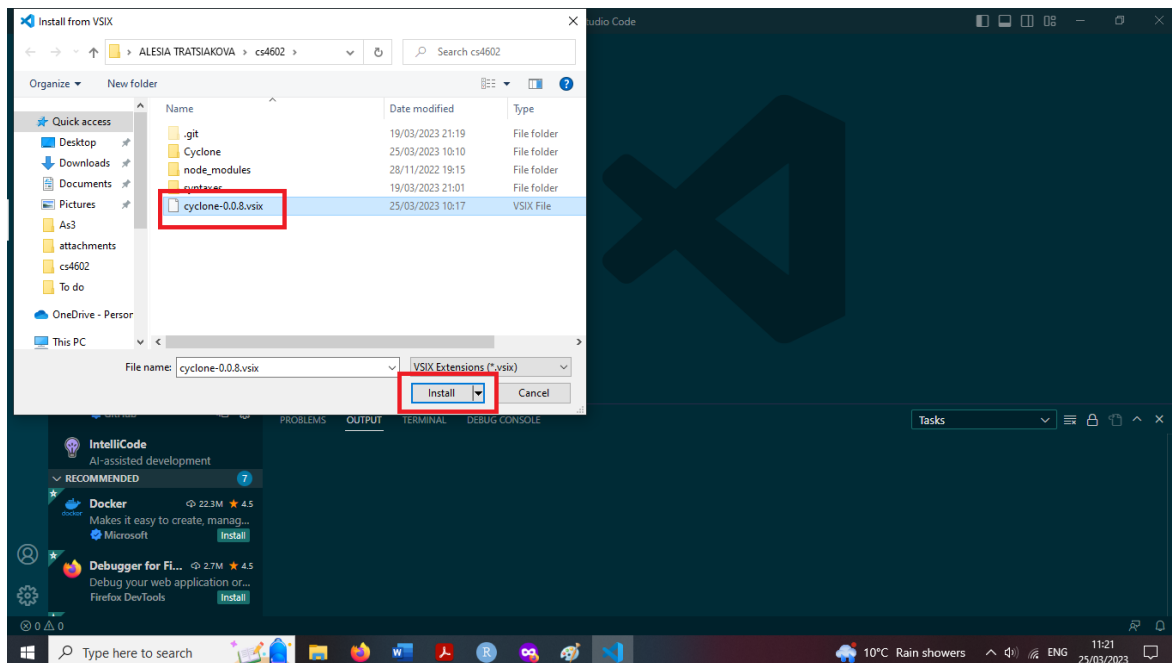
4. Click on *Views and More Actions* button (...) at the top right corner.



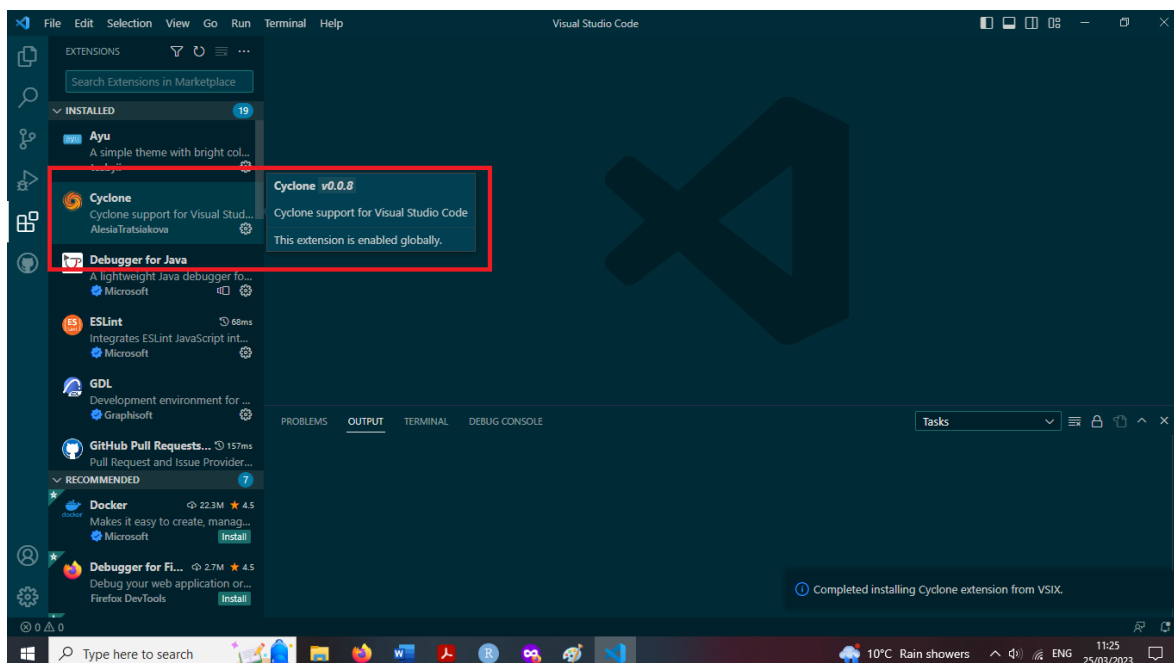
5. Run *Install from VSIX...* command.



6. Navigate to the folder where you have cyclone-0.0.8.vsix downloaded. Choose it and click *Install* button.



7. Wait until the extension is installed.
8. If the extension is properly installed, you will be able to see it in the list of extensions on *Extension* tab of Visual Studio Code. If it is not here, you need to close and restart Visual Studio Code. Now you can enjoy all features of Cyclone extension!



View and edit Cyclone files

You can view and edit Cyclone files in VS Code environment the same way you did before. But Cyclone extension provide additional features such as syntax highlighting, bracket matching, bracket auto closing and bracket auto surrounding, comment toggling. They become available instantly after Cyclone extension installation.

Syntax features are automatically applied to files with .cyclone extension.

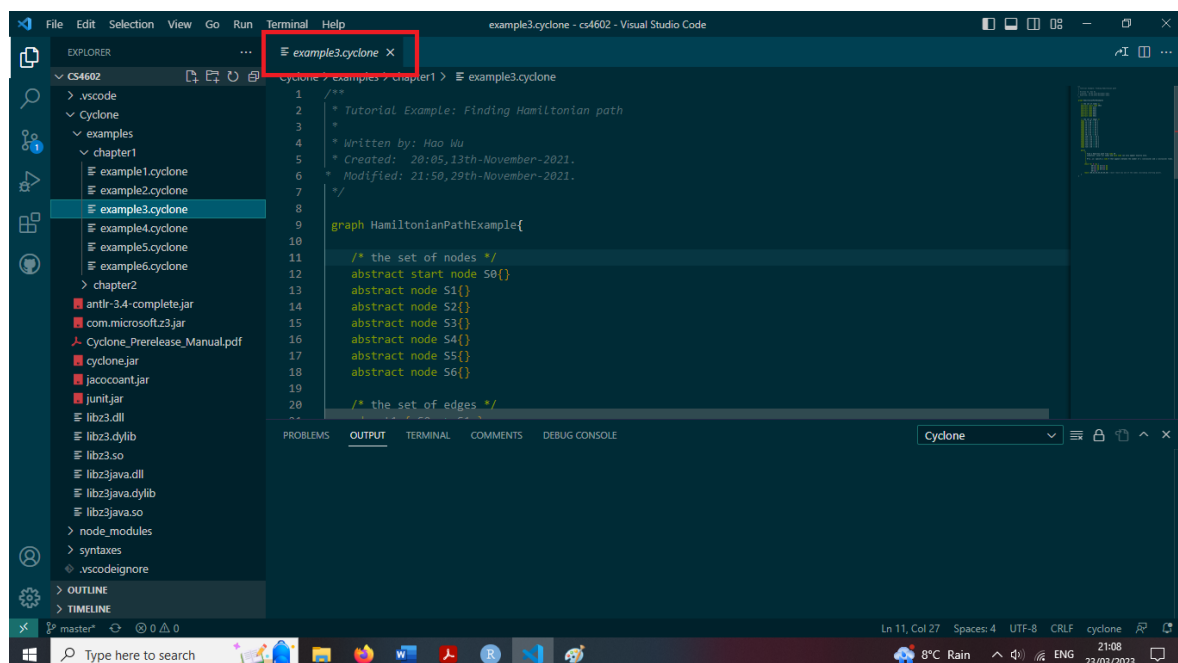
Syntax highlighting feature assumes colour coding of keywords, variables, constants, strings and comments.

List of keywords can be found at the following link

https://classicwuhao.github.io/cyclone_tutorial/expr/reference.html

Run Cyclone files

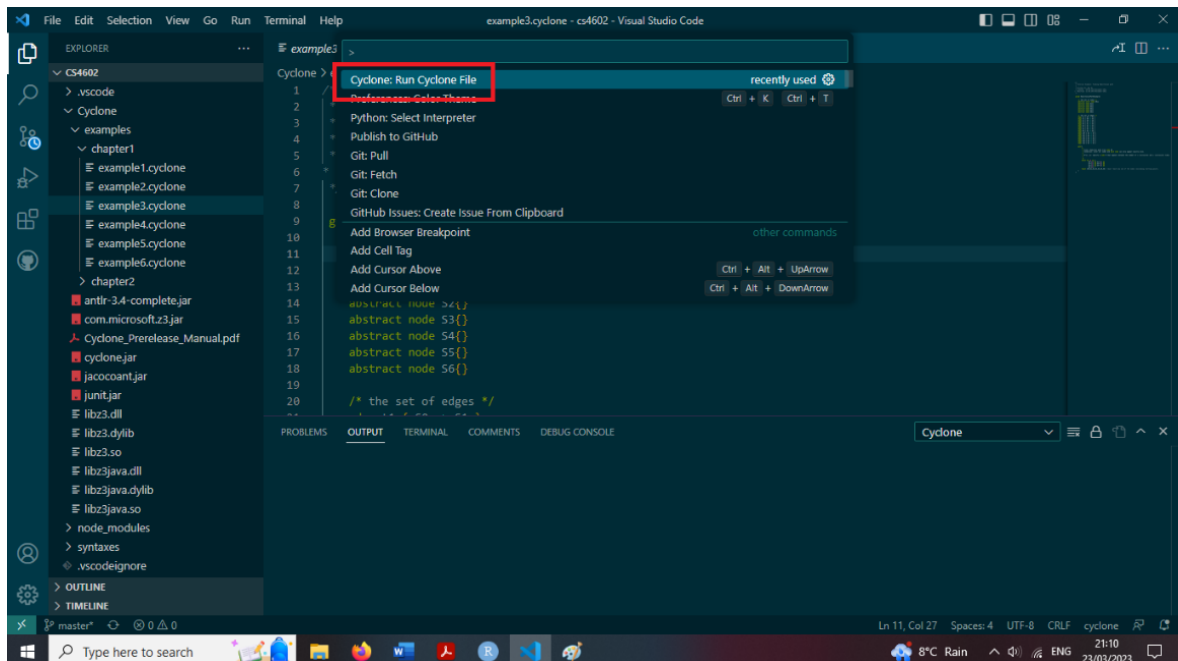
1. Open Cyclone file you want to execute in Visual Studio Code and make its tab active.



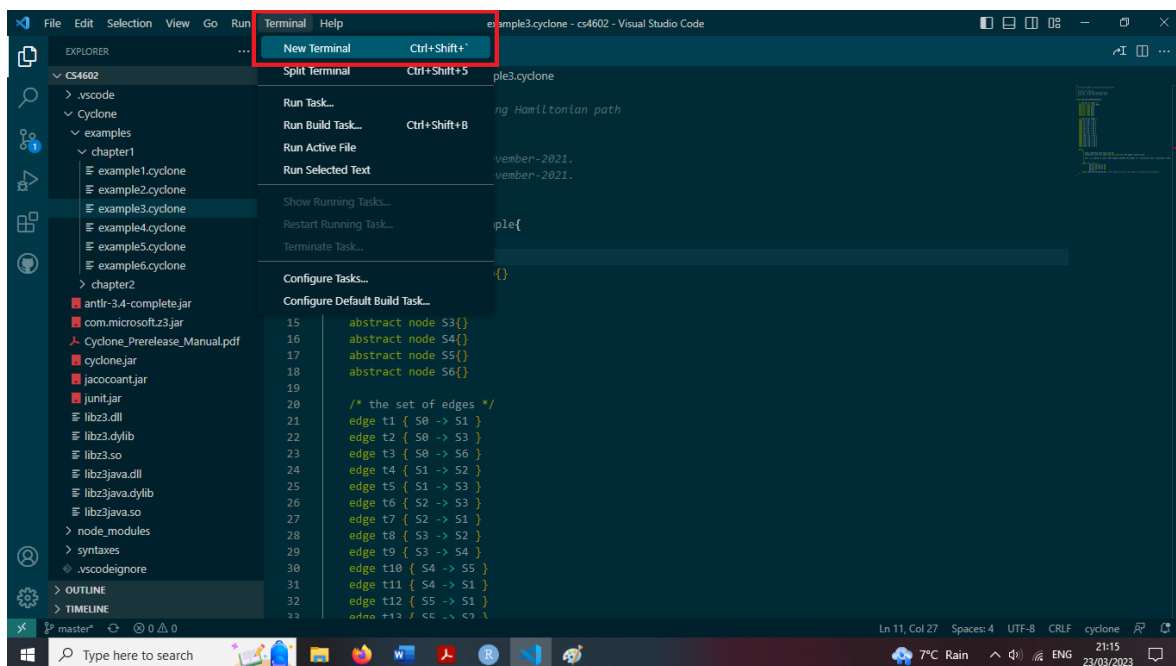
2. Open Command Palette (CTRL + SHIFT + P)*

* Alternatively, you can open Context Menu, accessible by right click.

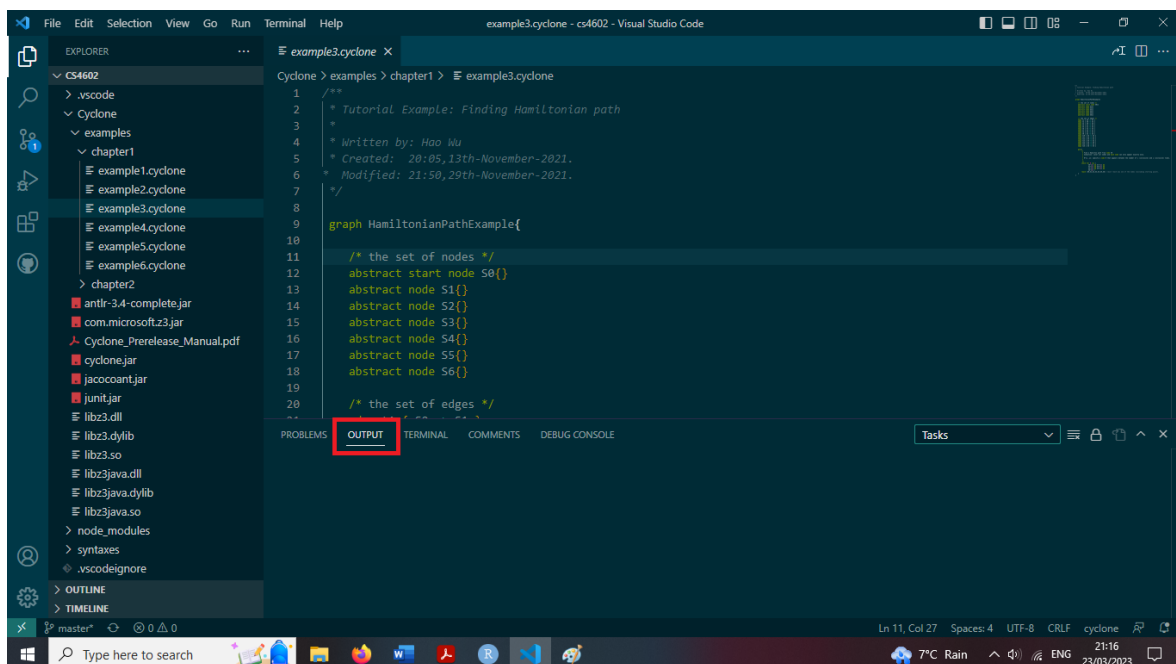
3. Choose *Cyclone: Run Cyclone File* command



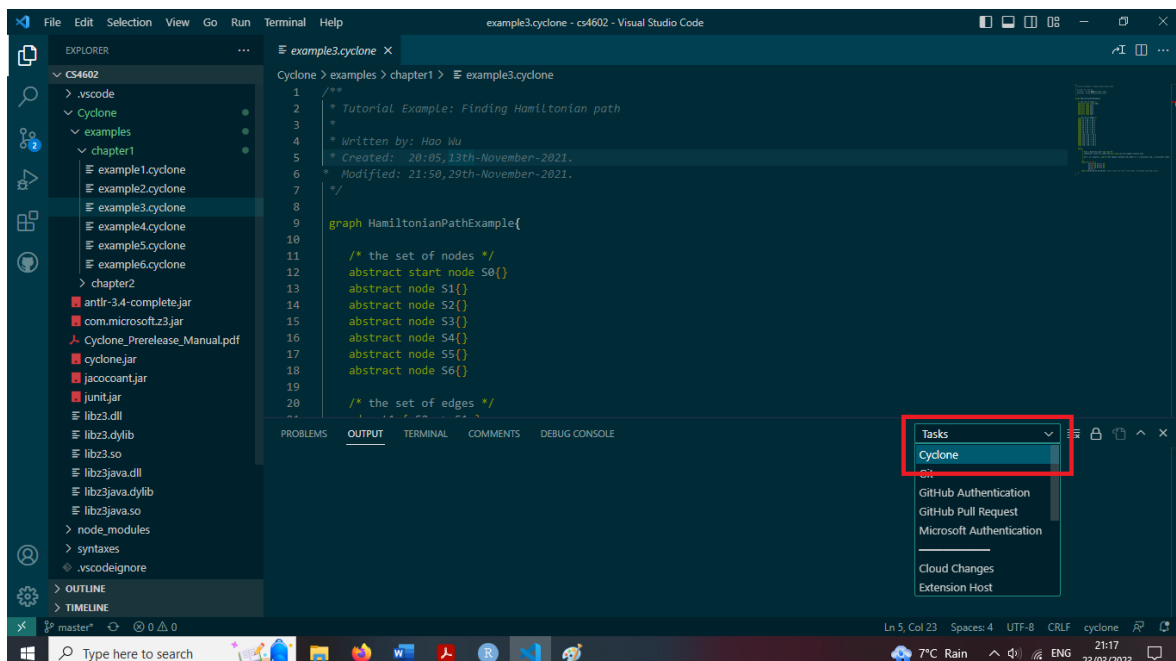
4. Open VS Code Terminal (if haven't done yet) using *New Terminal* command from *Terminal* menu.



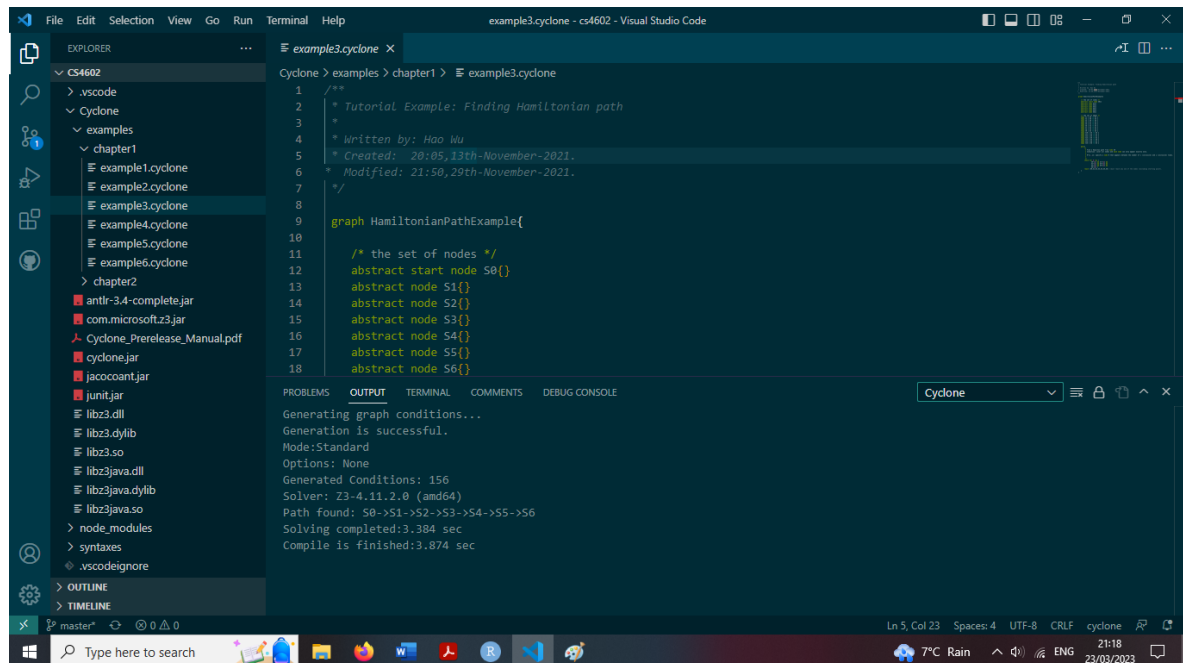
5. Proceed to *Output* tab.



6. Choose *Cyclone* option from a drop-down menu to the right.

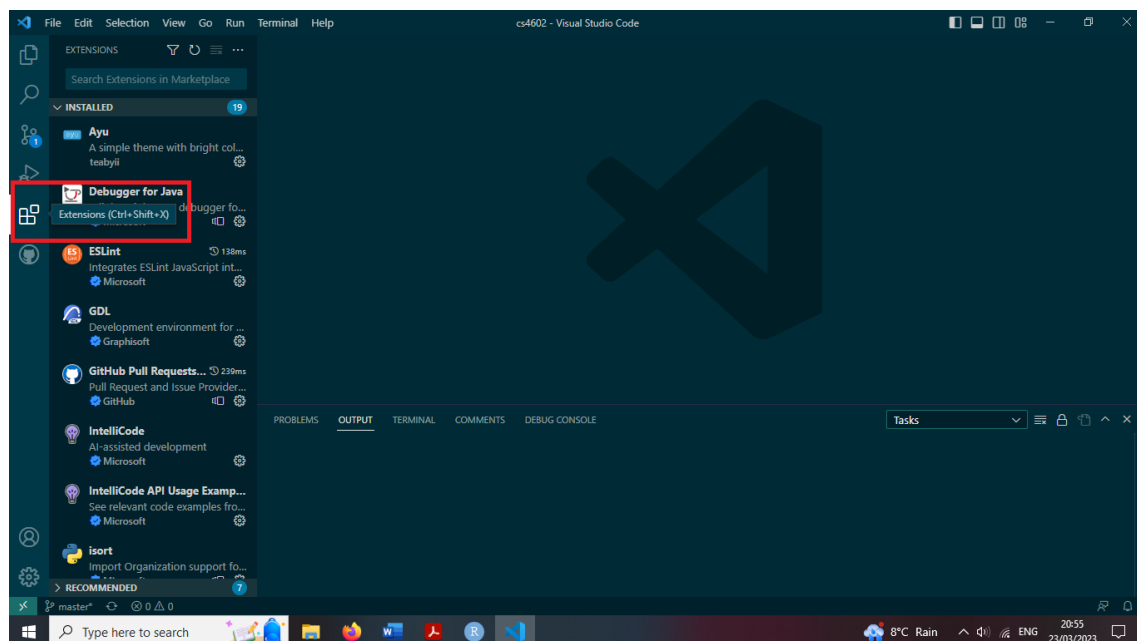


7. Output information and/or error messages can be read from here.

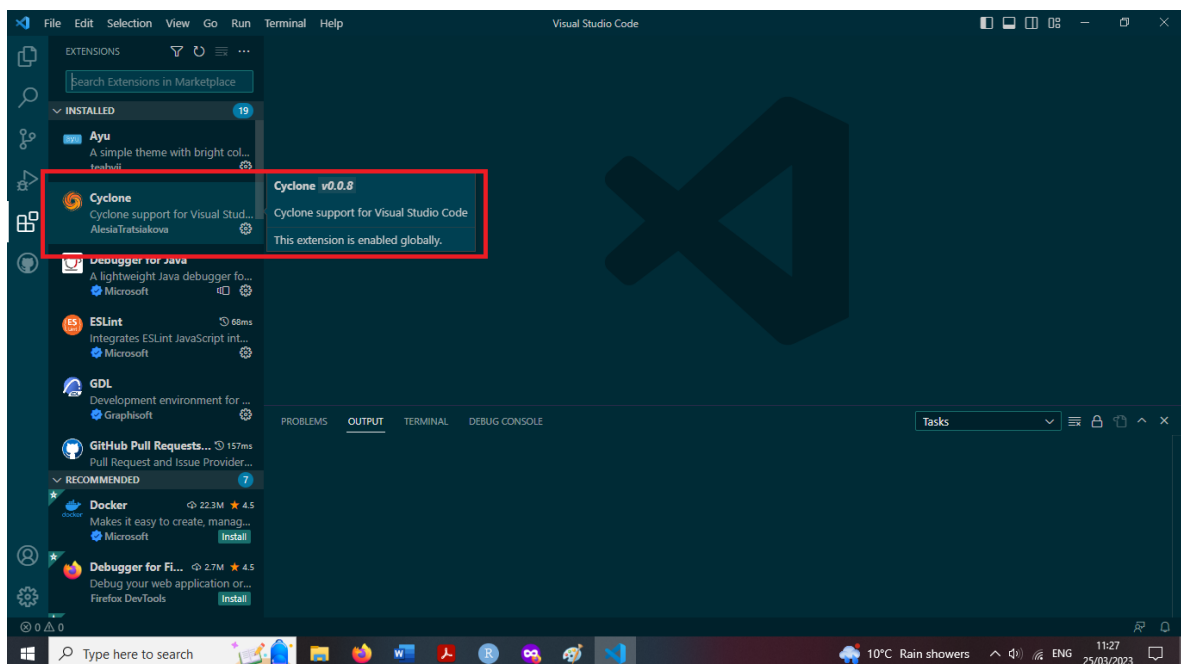


Disablement and Uninstallation

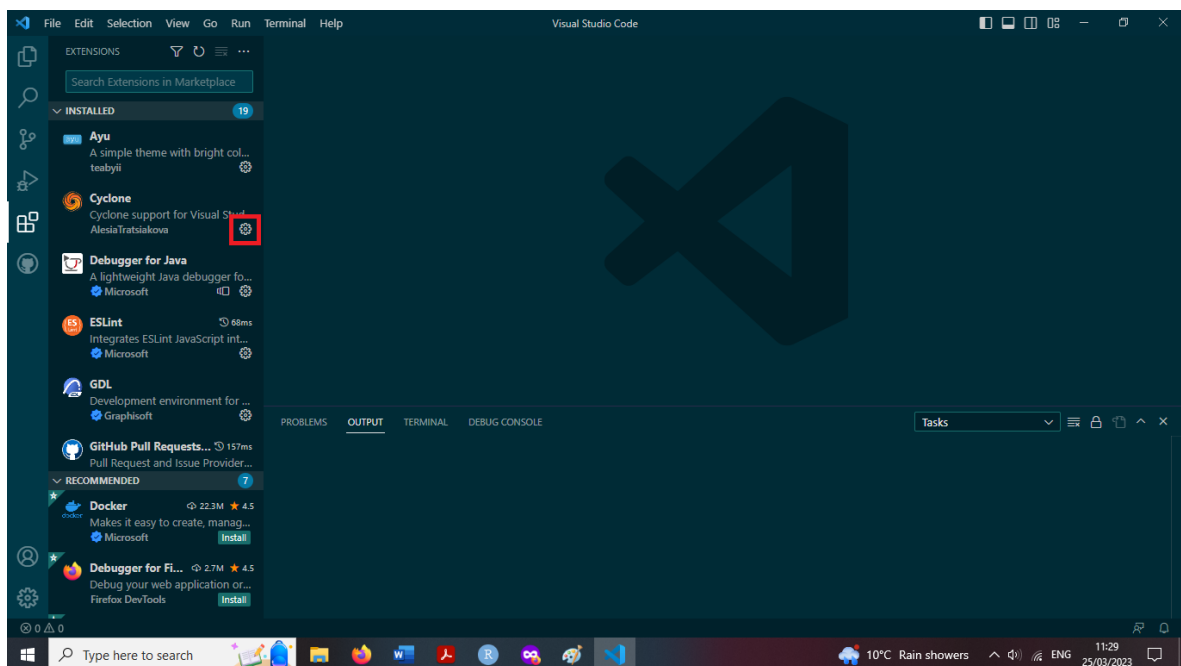
1. Open *Extensions* tab on the left panel.



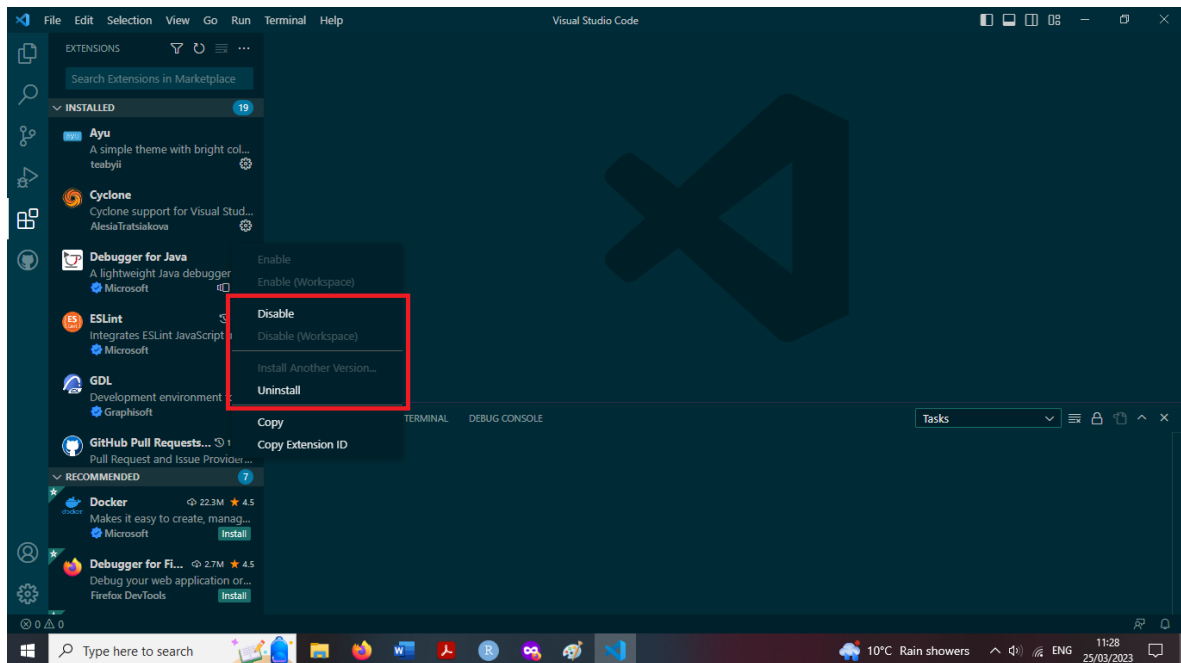
2. Find *Cyclone* extension in the list.



3. Click on the *Settings* button (a gear in the bottom right corner).



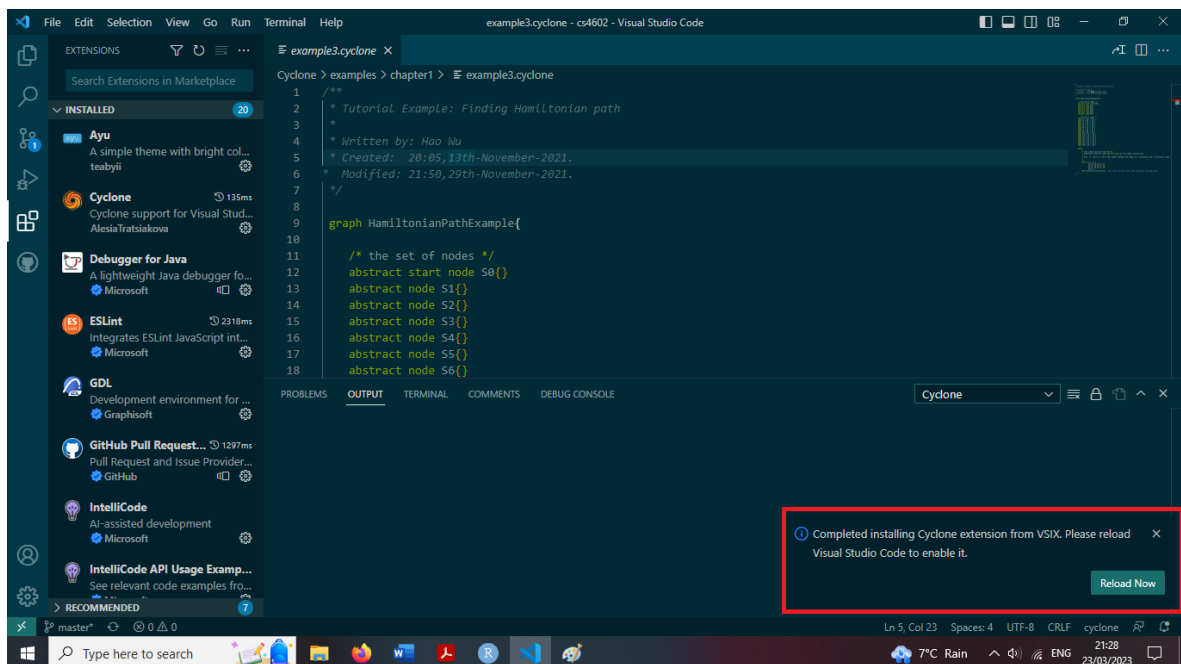
4. Choose an option from the menu.



Update

To install a newer version of the extension, follow the steps listed in “Installation” chapter of this manual.

After successful installation a pop-up window will appear, requesting to reload Visual Studio Code. Confirm this action by clicking *Reload now* button.



There is no need to uninstall the extension prior to update.

Troubleshooting

- ✖ The extension does not work or work incorrectly in Linux or Chrome OS.
- ✓ Even though the extension was designed to be OS independent, due to a lack of technical resources, therefore full functionality of the extension for these operating systems is not guaranteed.
- ✓ It is recommended to use Windows or MacOS instead.

- ✖ The functionality and/or syntax highlighting do not match what was declared on Cyclone author's website.
- ✓ Cyclone programming language is constantly being developed and improved by its creator. The version of Cyclone VS Code extension which is installed on your machine can be outdated.
- ✓ It is recommended to download and install the latest version of Cyclone extension (as explained in "Update" section of this manual.

- ✖ After running .cyclone file you get the next error message in the output channel:
'java' is not recognized as an internal or external command, operable program or batch file.
- ✓ Cyclone is a java-based programming language. It is necessary to have Java installed on your machine to be able to use it.
- ✓ Download Java from the official website, install it and configure your environment variables, JAVA_HOME and PATH.

In case of any other problems with Cyclone extension one can contact its creator.

Contacts

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