

# CS50 IDE

### Overview

The CS50 IDE (<u>https://cs50.io</u>) is a cloud-based Integrated Development Environment. It features an Ubuntu environment with a browser-based editor, word completion, a GUI-based GDB debugger, and customizable options such as layouts, themes, and keyboard shortcuts. It supports syntax highlighting for C, python, JavaScript, and many other languages.

Key Terms

- IDE
- terminal
- debugger
- commands

As the IDE is cloud-based, no downloaded software or specific hardware specifications are required. Thus, users can continue working even if they use different computers. You and your students will be using the CS50 IDE throughout the school year for creation, debugging, collaboration, and submission of programs.



# Set Up

For a detailed guide on how to set up the CS50 IDE and further information on usage, please visit <u>the CS50 IDE manual page</u>.

# Offline Mode

For students who may not have reliable access to internet at home, the CS50 IDE can also be downloaded as an <u>offline version</u> using Docker! Students can then sync changes in their IDE with the online version when they get on school wifi.

### Commands

The CS50 IDE supports the following useful commands that can be written in the terminal:

Command	Description	Example
./ <program_name></program_name>	Runs C Programs	./hello
check50 <problem_slug></problem_slug>	Runs code through test cases to check for correctness	check50 cs50/2017/ap/hello
<pre>debug50 <file_name></file_name></pre>	Runs the GDB debug- ger	debug hello.c
help50 <command_line_arguments></command_line_arguments>	Provides help for error messages	help50 make hello
make <program_name></program_name>	Compiles C programs	make hello
<pre>python <file_name></file_name></pre>	Runs python programs	python hello.py
<pre>style50 <file_name></file_name></pre>	Checks if student code conforms to CS50's style guide	style50 hello.c
<problem_slug></problem_slug>	Allows students to submit code to cs50. me	submit50 cs50/2017/ap/hello