

GECG10069 (561085) F25: Introduction to Programming (C++)

Lab 1 : Programming on OneCompiler



What you will learn from Lab 1

In this laboratory, you will learn how to write your own code and execute it on One Compiler.

TASK 1-1 : HOW TO CODE ON ONECOMPILER

- ✓ Search “OneCompiler” (<https://onecompiler.com/>) and choose “**C++**”.

The screenshot shows the OneCompiler homepage. At the top, there's a navigation bar with links for Pricing, Learn, Code, Deploy, More, and LOGIN. Below the navigation is a search bar with placeholder text "Bring your ideas to life by chatting with AI Try vibe coding today". The main heading "Code online with One Compiler." is prominently displayed. Below the heading is a subtext stating "One Compiler helps over 12.8 million users worldwide write code online." A search bar is followed by a "POPULAR" tab and other tabs for PROGRAMMING, WEB, and DATABASES. A grid of language icons is shown, with C++ being the one highlighted by a red circle.

Category	Icon	Language
POPULAR	HTML	HTML
	Python	Python
	JavaScript	JavaScript
PROGRAMMING	Java	Java
	MySQL	MySQL
	C	C
WEB	C++	C++ (highlighted)
	PHP	PHP
	PL/SQL	PL/SQL
DATABASES	C#	C#
	Assembly	Assembly
	Lua	Lua

✓ Type your code here

The screenshot shows the OneCompiler web interface. In the top navigation bar, the 'CPP' button is highlighted. The main area displays a code editor with the following C++ code:

```
#include <iostream>
using namespace std;
int main()
{
    cout << "Hello, World!";
    return 0;
}
```

A red box highlights the code editor area. To the right, there is a 'RUN' button in a pink box, and below it, a text input field labeled 'Input for the program (Optional)' and a text output field labeled 'Output: Click on RUN button to see the output'.

✓ Then click “RUN” button and execute your code

The screenshot shows the OneCompiler interface after clicking the 'RUN' button. A red circle highlights the pink 'RUN' button in the top right corner of the toolbar. The rest of the interface remains the same as the previous screenshot, showing the code editor and the 'Output' field.

✓ Execution result will be shown at here

The screenshot shows the OneCompiler interface after the code has been executed. A red box highlights the 'Output' field, which now contains the text 'Hello, World!'. The rest of the interface is identical to the previous screenshots.

TASK 1-2 : HOW TO CODE ON ONECOMPILER

✓ Quick example

```
// lab1-1.cpp
#include <iostream>
using namespace std;

int main()
{
    cout << "Hello! Welcome to Introduction to Programming." << endl;
    cout << "This course is taught by Prof. Charles Wen at NYCU." << endl;
    cout << "We, the TAs, will always be here to help you when you face difficulties." << endl;
    cout << "Let's begin our C++ learning journey together!" << endl;
    return 0;
}
```

EXERCISE 1-1 : Print a smile

- ✓ Rules: Use std::cout only. No input, loops, or variables.
- ✓ Do NOT print the ruler line (numbers); it's for alignment only.

Output:

123456789
^ ^
o

EXERCISE 1-2 : Print a cat

- ✓ Rules: Use std::cout only. No input, loops, or variables.
- ✓ Do NOT print the ruler line (numbers); it's for alignment only.
- ✓ Backslash \ is an escape character; print it with \\.
- ✓ Use a lowercase 'o' for the eyes.

Output:

123456789
/_/\\
(o . o)
> ^ <