


C Programming



Welcome!!

Please check attendance individually.
(Mobile App)

Professor Kweon, Tae Deok 권태덕

tdkweon@wsu.ac.kr

042-629-6647

Office Hours: Mon. ~ Thr. (13:00 ~ 17:00)

Major in Computer Science

Samsung Electronics.
Video Display Division
(Advanced Tech.)

Samsung Global R&D Center
@shanghai (Director)

Samsung Electronics.
Manufacturing Process Tech.
(Smart Factory)

C, C++, Python, JS, React Native
Data ETL, Serial bus Tech.

Github for C class

<https://github.com/prof-kweon/2025-Fall-C-Language>



Students

- 01** | Check Attendance (Phone)
- 02** | Check your info @excel (Email, Korean phone)
- 03** | Create an email (recommendation: gmail) – github, VSC etc.
- 04** | Introducing ourselves

Things to do today

- 01** | Contents of C course to learn during the semester
- 02** | Course evaluation
- 03** | Development environment & setup
- 04** | Make the first program with C

Contents of C course to learn during the semester

Week	Contents
1	Course Description, Development Environment setup
2	Introduction of C, Data type, Operator
3	Statement (Condition, Loop)
4	Standard Input/Output
5~7	Arrays, Structures
8	Midterm exam
9~10	Pointers (Function Pointers, Pointer Operations)
11	File Input/Output
12	Dynamic Memory Allocation
13	Preprocessing, External Variables, Split Compilation
14	Mini Project
15	Final exam

Reference



The C Programming Language 2nd Edition

[https://seriouscomputerist.atariverse.com/media/pdf/book/C%20Programming%20Language%20-%202nd%20Edition%20\(OCR\).pdf](https://seriouscomputerist.atariverse.com/media/pdf/book/C%20Programming%20Language%20-%202nd%20Edition%20(OCR).pdf)

Any book related to C is fine

Course evaluation

Course evaluation	Distribution of points	Note
Attendance	20 points	by school system
Practice May change later!	10 points	Homework
	10 points	Mini Project
	10 points	Contribution & Attitude
Midterm exam	20 points	Write down what you studied on 2 sheets of A4
Final exam	30 points	Open book or Write down what you studied on 2 sheets of A4
Total	100	

* Grades are determined based on relative evaluation.

Break time

(Start at 10:30)



Password : //

Development Environment & setup

Recommended not to use wifi

- 01 | Chrome & Google drive
- 02 | Github
- 03 | IDE (VS code) & MinGW
<https://code.visualstudio.com/>
- 04 | Make the first my program

Development Environment & setup – Github & Git

01 | Make an account

02 | Create a repository

03 | Create two repositories as public
1. for the class practice
2. for homework & project

04 | Upload & Download files with github

* How to clone : <https://github.com/prof-kweon/2025-Fall-C-Language.git>

Development Environment & setup – MinGW

01

Download MinGW.zip in proper directory

https://drive.google.com/file/d/13XpAmMY30643qQaeEFd5Ye6EhRZWcJdt/view?usp=drive_link

02

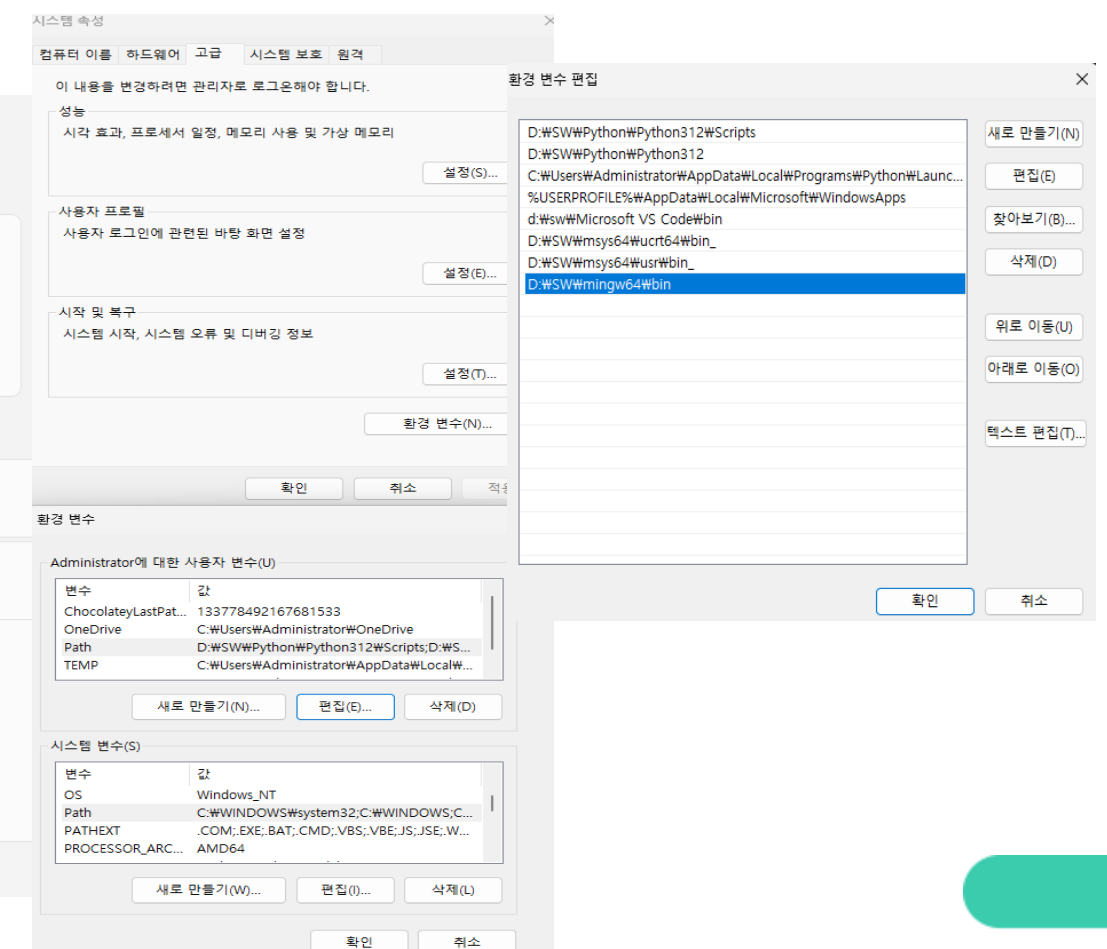
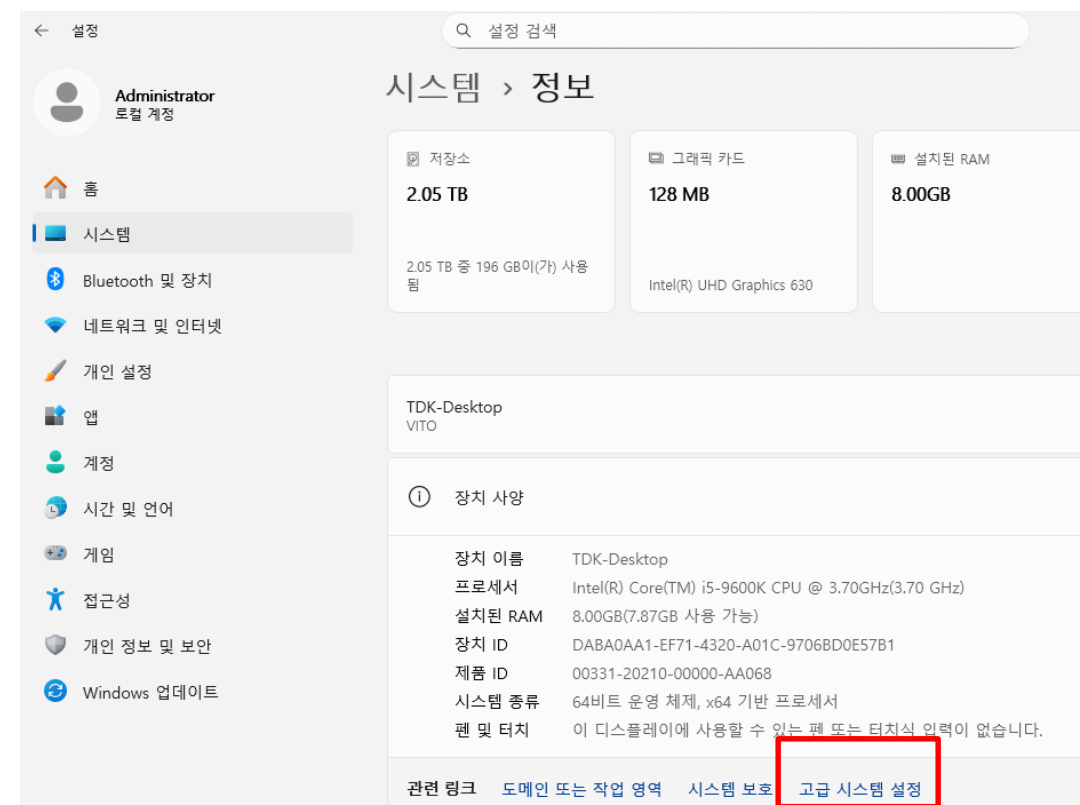
“Setting” > “System” > “Information” > “Advance System Setting” > “Environment Variables” > “Path”. and add the directory to the end of that string. “c:\folder\mingw64\bin”

03

Open a terminal “cmd”

04

Type “gcc –version”



Development Environment & setup – IDE (VSCode)

- 01** | Install VSCode
<https://code.visualstudio.com/>
- 02** | Connect VSCode & Google drive
Open Folder → Select Google Drive (ex, G:W)
- 03** | Create main.c
Install C/C++ Extension Pack & Restart C/C++
- 04** | Verify installation → Build your first program
Open “Terminal”

Write the first my program

main.c

```
#include <stdio.h>

int main() {
    printf("Hello world!\n");
    return 0;
}
```

Build the first my program

Use the -c flag with gcc to compile the source code into an object file without linking.

gcc -c main.c -o main.o => main.o

gcc main.o -o my_program => my_program

If you don't need an object file and just want an executable, omit the -c flag and use -o flag.

gcc main.c -o my_program => my_program


Development Environment & setup – Make the first my program

- 01** | @ windows cmd console
- 02** | @ VSCode (in terminal) – recommend
- 03** | @ Codespaces (after uploading the files in github)

Homework

See you next week!

DO NOT miss the classes



About codyssey

- 01** | What is codyssey
- 02** | Class with codyssey (Requirement, discussion, coding)
- 03** | Homework with Codyssey
- 04** | Peer evaluation & review

https://www.innovationacademy.kr/en/innovation_academy/business_info/codyyssey.html

Codyyssey Introduction



What is the Codyyssey ?

An Innovative SW Education Platform with a "3-No" Approach

Codyyssey is an innovative software education platform designed to address domestic educational needs through a "3-No" approach: No Lecture, No Textbook, No Tuition. By adopting Problem-Based Learning (PBL) and industry-focused projects, it fosters self-directed and collaborative learning to develop field-ready talents for local communities and industries.

Codyyssey Overview	Educational Features	Problem-Based Learning (PBL) Without Traditional Lectures; Peer Learning and Peer Assessment
	Educational Level	Foundations of Computer Science (Industry-Demand Based Undergraduate Level); Projects (Practical Level)
	Program Duration	Modularized by Technology: Medium- to long-term courses, ranging from 6 to 18 months
	Learning Method	Offline (with Online Support)
	Learning Level	Customized Problem Recommendations Based on Competency

Course structure & method

- Course duration: 15 weeks
- (Codysey) Problems: 10 sub-courses with 80 problems
 - Essential: 20 problems, Optional: 60 problems
- Course operation:
 - Introductory lectures: 1 ~ 4 weeks
 - PBL classes: 10~13 weeks
 - Examination: 1 week (Open book, Don't memorize, Do understand)
- PBL class operation:
 - Lecture with 1~2 problems solving of the week
 - In-class exercise with 1~2 problems (Team)
 - Assignments with 16 problems, followed by group sharing in the next weeks

Development Environment & setup – Codysey

01 | Check login

<https://usr.codysey.kr/main/>

02 | Explore menu tree & read a project story

03 | Team discussion & Peer evaluation/review

Next week