C Programming (W14)

Welcome!!
Please check attendance individually.
(Mobile App)

Things to do today

01 Notice : The schedule of final exam & Policy

02 Confirm practice submission

03 Homework : Codyssey All (10 Questions) ~6/13
Announce:

Schedule of final exam

	C-001(Mon)	C-002(Tue)	C-004(Wed)	C-003(Thur)
Review class	06/16	06/10	06/04	06/12
Notes			**2025-06-11 No class**	
Final exam	2025-06-18 (수)	2025-06-17 (Tue)	2025-06-18 (Wed)	2025-06-19 (Thur)
Room		S2 302 (9:00 ~ 12:00)	S2 301 (9:00 ~ 12:00) S2 302 (9:00 ~ 12:00)	S2 302 (9:00 ~ 12:00)

Course evaluation

Course evaluation	Distribution of points	Note
Attendance	20 points	-1 point per absence
Codyssey	30 points	10 essential problems: 3 point per a problem (Q.2 ~ 11)
	Extra points	9 optional problems: 0.5 point per a problem (Q.12 ~ 20)
	10 points	Contribution (Peer evaluation & review)
Practice & Quiz	20 points	Practice: Every class (2 ~ 5 practices) - send an email by the same day with screen capture of results Quiz: In class, depends on schedule
Final exam	20 points	Open book (Allow A4, 2Pages Summary)
Total	**100**	* if complete Codyssey 80 problems: A+

* Grades are determined based on relative evaluation.

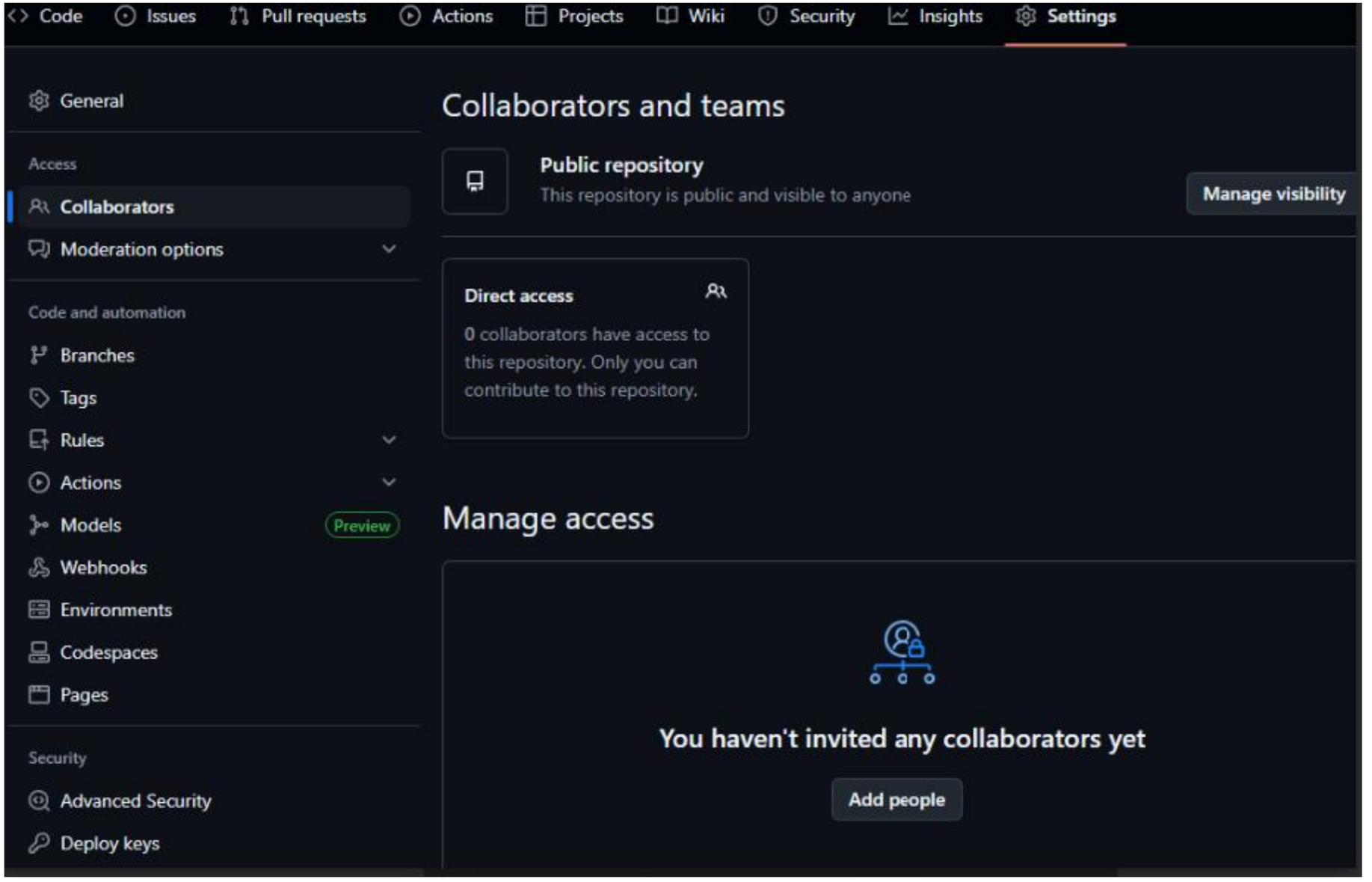
Codyssey problems for extra points

If too many students have solved all the Codyssey problems,
please be advised in advance that all factors such as **the final exams, practices, mini-projects and attendance including codyssey problems** must be considered together to determine the final grades.

Please keep the results of solving optional codyssey problems separately in a **private github**. And **add professor's email as a collaborator**.

If you have solved more than 10 codyssey problems, please submit the following information to the professor by email immediately.

- **Name / C section / Student ID**
- **Private github address / How many problems you solve.**


Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
General
Access
Collaborators
Moderation options
Code and automation
Branches
Tags
Rules
Actions
Models
Preview
Webhooks
Environments
Codespaces
Pages
Security
Advanced Security
Deploy keys
Collaborators and teams
Public repository
This repository is public and visible to anyone
Manage visibility
Direct access
0 collaborators have access to this repository. Only you can contribute to this repository.
Manage access
You haven't invited any collaborators yet
Add people

Codyssey Policy

I know that some students completed the optional Codyssey problems to earn extra points. To ensure fairness for those who studied and solved the problems themselves, I need to distinguish between students who genuinely worked on them and those who simply copied and pasted the solutions on GitHub.

After verification, you may be asked to explain the contents of your code, if necessary.

Subproject	SLearning Course	Problem		Essential
Step 1: Audition for Cody Enter	**Process 1:** Wasteland with Value, Magratea (Standard Input/Output)	01 Question 1 Introduce myself		X
		02 Question 2 Project Kick-Off!	1	O
		03 Question 3 Children who became Milliways candidates	2	O
		04 Question 4 Who will choose the one who will hold the key to destiny?	3	O
Step 2: 8-Step Training Program	**Process 2:** Sprouts Blooming in the Wasteland (Multidimensional Arrays)	01 Question 1 8-step training program	4	O
		02 Question 2 Dumbass, the problem is physical strength!	5	O
		03 Question 3 My Basic Workout Routine	6	O
	Process 3: Wounds Heal in the Gardener's Hands (Structures)	01 Question 1 A Fight with Yourself	7	O
		02 Question 2 Facing Trauma	8	O
		03 Question 3 There is No Way to Escape Your Own Ghosts	9	O
	Process 4: Temperature of Language (Pointers)	01Question 1 How Good is My Korean?	10	O
		02 Question 2 Consonants and Vowels		X
		03 Question 3 Basic Grammar Learned through Puzzles		X
	Process 5: Temperature of Sound (Function Pointers, Pointer Operations)	01 Question 1 Facing the Present		X
		02 Question 2 Finding My Voice		X
		03 Question 3 Those Who Realized the Principle		X
	Process 6: A Body Like Dry Firewood is Reborn (File Input/Output)	01 Question 1 Body and Mind Separately		X
		02 Question 2 Surrendering Your Body to the Pattern		X
	Process 7: I'm Not the Same as I Was Yesterday (Dynamic Memory Allocation)	01 Question 1 People Make People		X
	Process 9: The Distance I Can Reach Out (Preprocessing, External Variables, Split Compilation)	01 Question 1 Shadow Life		X
Step 3: Debut	**Process 10:**			10

Practice evaluation

The full score for the one-week practices is 100 points.

Let’s check the number of submissions so far.

100	Perfect with minor problems
90	No src code or No results
75	Done 3/4
50	Done 2/4
25	Done 1/4
0	No email
-10	Each day (except weekend) Within 24 hours, it is considered the same day.

Cheating Policy

No computer, no phone, no extra material allowed.

Only A4 2 pages written by yourself are allowed, and A4 2 pages must be submitted together with the exam answer sheet after the final exam. (Expect 2 Hr)

If you look at other people's answer sheets or discuss together during the exam, it will be considered cheating and you will receive an F, so don’t do.

Codyssey problems for extra points

- 너무 많은 학생들이 Codyssey 문제를 모두 풀었다면 학교규정상 A학점 배분을 위해, 최종 성적 산정 시 기말고사, 연습, 미니 프로젝트, 출석, Codyssey 문제 등 모든 요소를 종합적으로 고려해야 합니다.

- 선택 문제 Codyssey 소스코드는 비공개 GitHub에 별도로 보관해 주세요. 그리고 교수님의 이메일을 collaborator로 추가해 주세요.

- Codyssey 문제를 10개 이상 풀었다면, 다음 정보를 교수님 이메일로 제출해 주세요.
  . 이름 / C section / 학번
  . private gitHub 주소 / 풀었던 문제수

Codyssey Policy

많은 학생들이 추가 점수를 받기 위해 선택적인 코디세이 문제를 풀었다는 것을 알고 있습니다. 혼자 힘으로 문제를 풀고 공부한 학생들의 공정성을 위해, 코드를 복사하여 github에 붙여 넣은 학생들과 그렇지 않은 학생들을 구분이 필요합니다.

확인 후, 필요한 경우 코드 내용에 대한 설명을 요청드릴 수 있습니다.

Practice evaluation

1주일 연습의 만점은 100점입니다.

100 점 : 사소한 문제 제외 완벽
90 점 : 소스 코드 없음 또는 결과 없음
75 점 : 3/4 완료
50 점 : 2/4 완료
25 점 : 1/4 완료
0 점 : 이메일 없음

-10 : 매일 (주말 제외)
24시간 이내 제출은 당일로 간주됩니다.

Cheating Policy

No computer, No phone, No extra material.

오직 본인이 작성한 A4 2장만 허락되며,
시험 답안지와 함께 2장의 A4용지는 같이 제출해야 한다.

만일 시험 중에 다른 사람의 답안지를 보거나, 서로 협의
하는 것은 부정행위로 간주되고 F를 받을 수 있습니다.

Mini Project (No ChatGPT)

Today is our final class, and we'll be working on a mini project.
To become truly skilled at programming, understanding the overall **data flow** and properly **modularizing functions** is more important than just writing technical code.

It is recommended to form teams of 4 to 6 members.
Each team will give a presentation starting at 11 a.m. to explain the reasoning behind their project design. (5 ~ 10 minutes)

Mini Project (example)

We want to store information of 10 students and print out the information of the students. Consider modularization and write a structure and member functions.

[Structure]
- Student name, student ID, student grades

[Member functions]
- Function that prints only the student name
- Function that prints only the student ID
- Function that prints only the student grades
- Function that prints the student name, ID, and grades
- Function that prints the average grade of all students

Mini Project (1)

학생 10명의 정보를 저장하고 학생들의 정보를 출력하고자 한다. 모듈화를 고려해서 구조체와 멤버 함수를 작성하시요.

[구조체]
- 학생 이름, 학생 ID, 학생 성적

[멤버 함수]
- 학생 이름만 출력하는 함수
- 학생 ID만 출력하는 함수
- 학생 성적만 출력하는 함수
- 학생 이름, ID, 성적을 출력하는 함수
- 학생 전체 평균 성적을 출력하는 함수

Mini Project

Write a car structure and a program to move the car from the starting point to the destination.
The car moves one step(x or y) at a time on the coordinates by receiving the driver input or by calculating coordinate automatically.

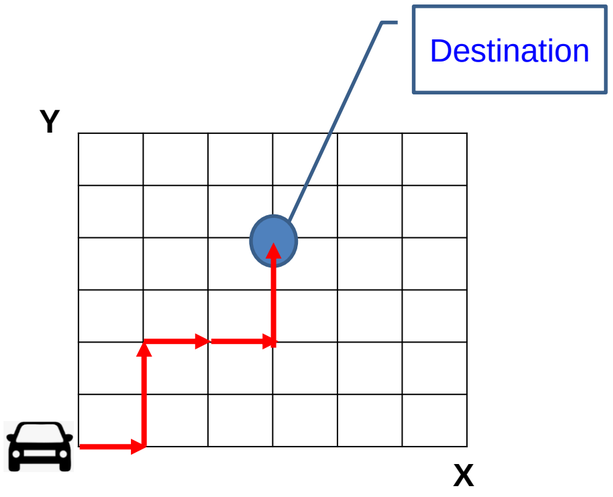
Input: Start, Left Turn, Right Turn, Backward, Stop

[Car Structure]

-

[Car Control Function]

-



[Step 1]

- Define a `Car` struct with 4+ member variables
- Create an array of `Car` structs (initialize 5 or more)
- Get user input for one `Car, then store new Car into the array of struct`
- Function to print all `Car` information
- Function to print selected `Car` only

[Step 2]

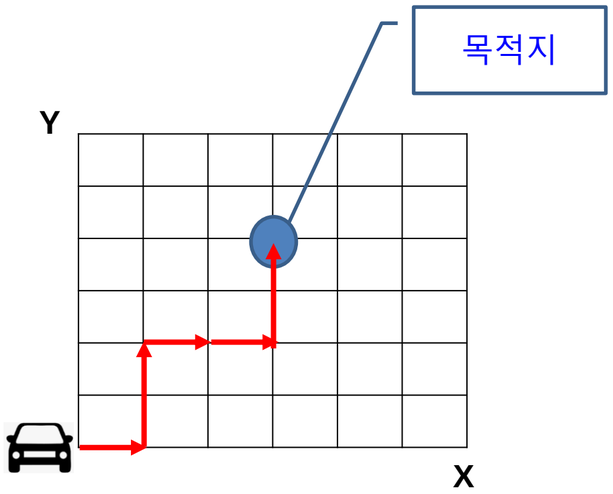
- Set the current car position (x, y) = (0, 0)
- Get destination coordinates from the user
- Function to move car step-by-step to the destination (print each step)
    . By user input
    . Calculate automatically
- Create a main function to complete all steps

Mini Project (2)

자동차 구조체를 작성하고, 자동차를 출발지에서 목적지까지 이동하도록 하는 프로그램을 작성하시요
자동차는 조정자 입력을 받아 좌표의 한칸씩 이동한다.
Input: 출발, 좌회전, 우회전, 후진, 멈춤

[자동차 구조체]
-

[자동차 조절 함수]
-



[1단계]

4개 이상의 멤버 변수를 갖는 Car 구조체를 정의합니다.

Car 구조체 배열을 생성합니다(5개 이상 초기화).

한 Car에 대한 사용자 입력을 받은 후, 새 Car를 구조체 배열에 저장합니다.

모든 Car 정보를 출력하는 함수입니다.

선택한 Car만 출력하는 함수입니다.

[2단계]

현재 자동차 위치(x, y)를 (0, 0)으로 설정합니다.

사용자로부터 목적지 좌표를 가져옵니다.

자동차를 목적지까지 단계별로 이동하는 함수입니다(각 단계를 출력합니다).

. 사용자 입력에 따라 step 단위로 이동.

. 자동 계산하여 이동.

모든 단계를 완료하는 main 함수를 생성합니다.

See you next week!
DO NOT miss a final exam