

C Programming (W8)



Welcome!!

Please check attendance individually.
(Mobile App)

Things to do today

01 Notice: Attendance & Course evaluation

02 Lecture Notes (Ch.7)
- Loop

03 Homework:

Attendance

If you are 15 minutes late for class, the attendance system will automatically check for absence.

In the future, when requesting correction of an attendance system error, correction will not be made unless you prove your attendance time. (e.g., login time, time capture, etc.)

수업에 15분 늦는 경우, 출석 시스템에서 자동으로 결석으로 간주됩니다.

향후 출석 시스템 오류 수정 요청 시, 출석 시간(예: 로그인 시간, 시간 기록 등)을 증명하지 않는 한 수정이 불가능합니다.

Course evaluation

Previous

Course evaluation	Distribution of points	Note
Attendance	20 points	-1 point per absence
Codysey	40 points	20 essential problems: 2 point per a problem
	Extra points	60 optional problems: 0.5 point per a problem
	20 points	Contribution (Peer evaluation & review)
Final exam	20 points	Open book
Total	100	Complete Codysey 80 problems: A+

* Grades are determined based on relative evaluation.

Course evaluation

Changed!!!

Course evaluation	Distribution of points	Note
Attendance	20 points	-1 point per absence
Codysey	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) * Email including C-section, ID, Name - send an email by the same day with screen capture of results Quiz: In class, depends on schedule * Mac: Command (⌘) + Shift + 4 * Windows key + Shift + S
Final exam	20 points	Open book (A4, 2 pages of summary)
Total	100	* if complete Codysey 80 problems: A+

* Grades are determined based on relative evaluation.

Course 평가

Changed!!!

Course evaluation	Distribution of points	Note
출석	20 points	결석당 -1 점
Codysey	30 points	필수 문제 10개 : 각 3점 (Q.2 ~ 11)
	Extra points	선택 문제 9 개 : 각 0.5 점 (Q.12 ~ 20)
	10 points	참여율 (동료 평가)
Practice & Quiz	20 points	실습: 수업 중 2 ~ 5 문제 * Email : 이름과 학번 포함 - 수업이 있는날 자정까지 소스코드와 결과 화면을 이메일로 보낼것 퀴즈: 진도 고려하여 진행 * Mac: Command (⌘) + Shift + 4 * Windows key + Shift + S
Final exam	20 points	Open book (A4, 2 페이지 정리 노트)
Total	100	* if complete Codysey 80 problems: A+

* Grades are determined based on relative evaluation.

Good example

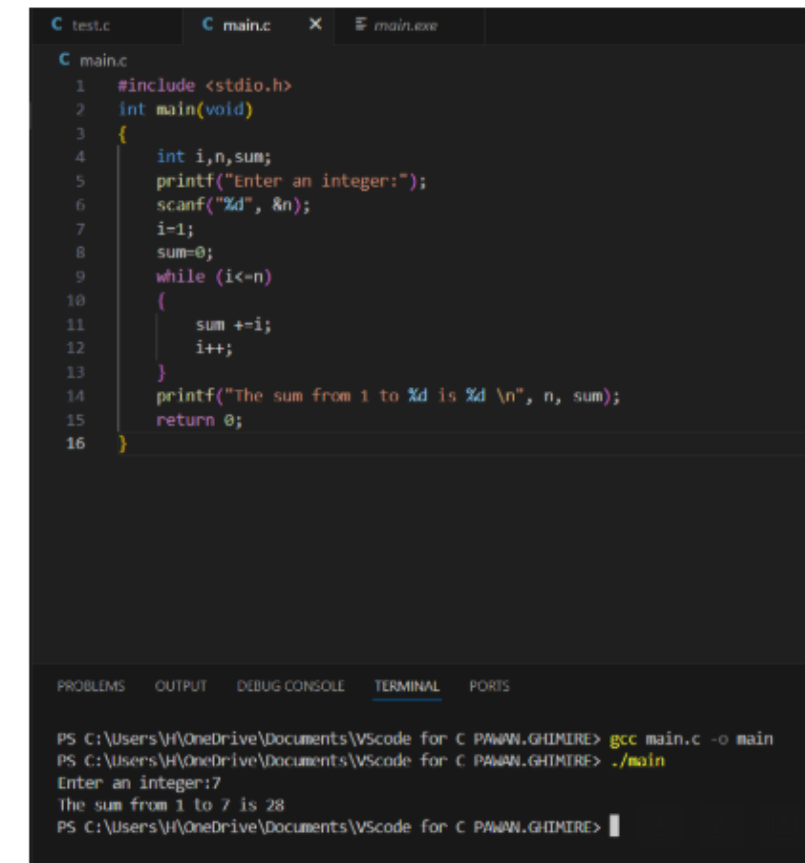
<https://mail.google.com/mail/u/0/#inbox/WhctKLbfDkWjBsquxdfmppbWgkttXSdghwRnZkFrVZCSDMJMskgcfMszPsXDQmgbtwNHpJg>

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1.

```

#include <stdio.h>
int main(void)
{
    int i,n,sum;
    printf("Enter an integer:");
    scanf("%d", &n);
    i=1;
    sum=0;
    while (i<=n)
    {
        sum +=i;
        i++;
    }
    printf("The sum from 1 to %d is %d \n", n, sum);
    return 0;
}
  
```



The screenshot shows a code editor with the following C program:

```

1 #include <stdio.h>
2 int main(void)
3 {
4     int i,n,sum;
5     printf("Enter an integer:");
6     scanf("%d", &n);
7     i=1;
8     sum=0;
9     while (i<=n)
10    {
11        sum +=i;
12        i++;
13    }
14    printf("The sum from 1 to %d is %d \n", n, sum);
15    return 0;
16 }
  
```

Below the code editor, the terminal output is shown:

```

PS C:\Users\H\OneDrive\Documents\VScode for C P\PAWAN.GHIMIRE> gcc main.c -o main
PS C:\Users\H\OneDrive\Documents\VScode for C P\PAWAN.GHIMIRE> ./main
Enter an integer:7
The sum from 1 to 7 is 28
PS C:\Users\H\OneDrive\Documents\VScode for C P\PAWAN.GHIMIRE>
  
```

The number of questions is the same, but the question items may change.

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)	01 Question 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

The number of questions is the same, but the question items may change.

Subproject	SLearning Course	Problem		Essential
단계 1: Cody Enter의 오디션	과정1 가치를 품은 황무지, 마그라테아	01문제1 나를 소개합니다.		X
		02문제2 프로젝트 Kick-Off!	Q1	O
		03문제3 밀리웨이즈 후보가 된 아이들	Q2	O
		04문제4 누가 운명의 열쇠를 짚 자를 선택하는가?	Q3	O
단계 2: 8단계 훈련 프로그램	01과정2 황무지에서 피어나는 새싹	01문제1 8단계 훈련 프로그램	Q4	O
		02문제2 바보야, 문제는 체력이야!	Q5	O
		03문제3 나의 기초 운동 루틴	Q6	O
	02과정3 정원사의 손길에 상처는 치유되고	01문제1 자신과의 싸움	Q7	O
		02문제2 트라우마와 마주하다	Q8	O
		03문제3 자신의 망령을 피할 길은 없다.	Q9	O
	03과정4 언어의 온도	01문제1 나의 한국어 실력은?	Q10	O
		02문제2 자음과 모음		X
		03문제3 퍼즐로 익히는 기초 문법		X
	04과정5 소리의 온도	01문제1 현재를 마주하다.		X
		02문제2 나의 소리를 찾다.		X
		03문제3 원리를 깨달은 자		X
	05과정6 마른 장작 같은 몸이 다시 태어나다	01문제1 몸 따로 마음 따로		X
		02문제2 패턴에 몸을 맡기다.		X
	06과정7 어제의 내가 아니다.	01문제1 사람이 사람을 만든다.		X
	08과정9 손 내밀면 닿을 수 있는 거리	01문제1 그림자 인생		X
단계 3: 데뷔	01과정10 빛나는 별이 되어라			10

Statement

In **C**, a **statement** is a complete instruction that tells the computer to do something.

It usually ends with a **semicolon (;)**. Compound Statement / Block. { }

Types of Statements in C:

1. **Declaration Statement:** Used to declare variables.

```
int a;
```

```
float pi = 3.14;
```

2. **Control Flow Statements:** Control the flow of execution.

- **Conditional statement:**

```
if (a > b) { ... }  
else {...}
```

- **Iteration Statement (Looping):**

```
for (int i = 0; i < 10; i++) { ... }  
while() {...}
```

Statement

C에서 문장은 컴퓨터에게 어떤 작업을 하라고 지시하는 완전한 명령어.

일반적으로 세미콜론(;)으로 끝남.

복합 문장/블록은 { } 사용.

C의 명령문 유형:

1. 선언문: 변수를 선언하는 데 사용.

```
int a;
```

```
float pi = 3.14;
```

2. 제어 흐름 문: 실행 흐름을 제어.

- 조건문

```
if (a > b) { ... }
else {...}
```

- 반복문

```
for (int I = 0; I < 10; i++) { ... }
while() {...}
```

See you next week!

DO NOT miss the classes

