Intermediate Programming

— Tutorial · Review of C programming (1) —

This course is the flipped classroom. Read "this document and HP of this course" carefully, and perform today's exercise respectively.

Waseda Univ.

Course Outline

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- The aim of the course is to enable students with a basic knowledge of the C programming to develop practical programs through practical programming.

Objectives

- We will be able to compute simple numerical problems
- We will understand concepts of programs and softwares more deeply.
- We will be able to write intermediate program and debug it.

How to learn

- You must watch a lecture Video before each lesson.
- You solve an exercise and submit your answer via the CourseN@vi system.
- If you have any questions, you can ask your teacher or teaching assistants.

Curriculum

Tutorial · Review of C programming (1)
Review of C programming (2)
Review of C programming (3)
Recursion (1)
Recursion (2)
Sort
Search
Stack and Queue (1)
Stack and Queue (2)
Numerical method for nonlinear equations (1)
Numerical method for nonlinear equations (2)
Numerical method for linear equations (1)
Numerical method for linear equations (2)
Modular Programming

Evaluation

Attendance

- You will fail your grade if you attend less than 10 lessons.
- You must register your attendance on the Course N@vi system.
- You will be marked absent if you delay more than 10 minutes.

Evaluation

- Number of attendance
- Exercises
- Homeworks
- Examination

Caution

- Any cheating (ex. copying someone's code entirely) is prohibited.

Today's exercise: Review of C programming (1)

- Review the contents of "Introduction to C programming: 1st–7th"
- KIKAN2: `http://www.oishi.info.waseda.ac.jp/~takayasu/classes/cp1_en.html`
- KIKAN8: `http://www-it.sci.waseda.ac.jp/CPR1/class08/index.html`
- Answer today's exercise (You need not submit your answer).

Review1

- Display "Welcome to C language!!" on the terminal.

Review2

- Fill in the missing words.

```
#include<stdio.h>

int main(){
int a;
double b;
[1]_____ c;
printf("Input a:");
scanf("%d",&a);
printf("Input b:");
scanf("%lf",&b);
c=a+b;
printf("a+b=[2]_____\n", c);
return 0;
}
```

Review3

Review: Write a program

Input 5 scores (for Math., Eng., Sci., Hist., NL: Each one is up to 100). The program calculates the average and evaluates the grade. Then it displays them on the screen.

- Evaluation of the grade is based on the following:

Sum	Grade	Sum	Grade
451	A++	151 250	C
351 450	A	150	F
251 350	B		

- Output of the program is as follows:

  Input your scores:
  Math: 95 *Enter*
  English: 86 *Enter*
  Science: 92 *Enter*
  History: 85 *Enter*
  National language: 91 *Enter*
  Your grade is A (Average is 89.8).

Review4

Review: Write a program

- Let S_N be factorial of N:

$$S_N = N!$$

- Input an integer N and calculate S_N.
- Then the program displays the result on the terminal.

  Input positive integer:10   Enter
  S_N is ??.

How to submit today's exercise

- Title of the exercise should be Exercise Part 01.
- Start your answer from the following form: I would like to submit an answer of the exercise 01. Student ID Your name." Answers are the followings:
  1. Describe your expectations in this course.
  2. Describe your objectives to study Intermediate Programming.
  3. If you will submit your answer, write your answer from here.

Answer must be submitted by 16:30 Sep. 28.
Make sure that your answer is status of submitted after submitting.