

A290/A590
Tools for Computing/Topics in Programming
System Programming with C and Unix.

Homework PROGRAM 2

DUE Friday, September 19, 2025 by 11:59.00.00pm (SHARP)

Submit your `callingfunc.c` file to your Canvas "Homework PROGRAM 2" assignment in the "Homework PROGRAMS" Group

Preliminary Information:

Your goal is to submit your version of `callingfunc.c` as presented in Meeting 5 and also including things from Meetings 4 and 6. If you have been keeping up, you may merely need to hand it in, with little or no modifications over what we did in class thru 9/15/2025 and will review on 9/17/25. NOTE: **You are NOT including anything from your Homework PROGRAM 1 `buffet.c` file.**

IMPORTANT REMINDER: As with PROGRAM 1 and ASSIGNMENT 1, you are **not** permitted to use any libraries, or any other programmatic strategies or structures beyond those shared in our class sessions preparing you for PROGRAM 2. This will continue to be true for all future PROGRAMS and ASSIGNMENTS, as previously announced.

Program 2 Requirements:

Create your version of `callingfunc.c` file and its contents that were demonstrated in class. You will find the expected **sample** output for each function in either the Meeting 4, Meeting 5, (and/or beginning of Meeting 6) guides. Your version merely means you created it on your own. Your version of `callingfunc.c` **must** include the following features:

1. Proper Comment Block at the head of the file.
2. Proper and appropriate "in-line" or "in the code" comments.
3. **Precise and detailed COMMENT explaining** what the line `"if (c[j]-c[k] < 10)"` and related code in "firstswap" actually does.
4. A function, called "loops" that properly mimics the output of the loops.c program from Meeting 4.
5. A function called "conditionals" that properly mimics the output of the conditionals.c program from Meeting 4.
6. A function called "firstswap" that properly mimics the output of the "firstswap" function from Meetings 5/6. [NOTE: Your displayed output for "firstswap" should mimic that shown at the top of Page 5 in Meeting 5 guide.]
7. A "calling function", i.e., the proper code in your `main()`, that allows all three (3) of the above functions to be run, in order, with a single command after compilation.

Again, BE SURE you thoroughly comment your actual code and include the expected Heading Comment Block show in Meeting Guide 2 and in numerous class examples. These comments, including the SPECIFIC comment on Hoover's code, and comment block will represent 20 of your 100 points.

Scoring:

Proper and adequate "in-code" Comments and proper Heading Comment Block: 20 points

[5 for Heading, 5 for In-line AND 10 for detailed comment explaining what the line

`"if (c[j]-c[k] < 10)"` and related code in "firstswap" actually does]

File compiles and runs: 20 points

"Loops" function written and works correctly: 15

"Conditionals" function written and works correctly: 15

"Firstswap" function written and works correctly: 15

"Calling function" allows all functions to run: 15

Handing in your Assignment

As with Program 1 and Assignment 1, you will have to use some form of “Secure FTP” program to submit your file to your Canvas “Homework PROGRAM 2” assignment in the Homework PROGRAMS group. It will usually take two steps: 1: Move the file from Silo to the computer you are using, 2. Upload the file from the computer you are using to Canvas with the usual method. If you have questions about this, ask them ASAP.