

Wednesday 5 November

Programming Assignment 08: due Wednesday 12 November

Class Activity 21:

Objectives:

Learn about function prototype/calling statement agreement.
Simple trace through functions.

Activity 1:

Copy `LecNotes21a.cpp` from `get12` to `c:\user`. Load it into Visual Studio as a C project. Answer the following questions.

- (a) What will be displayed on the screen? Show how you determined this.
We worked this example in class. However, `LecNotes21a.cpp` has a couple of extra `printf` statements that show where C is storing the variable information. Ordinarily, we never need to know *where* C is storing the information. These statements are included to illustrate that the address pointed to by `*pq` and `*pr` are the same as the addresses of `c` and `d` in main, respectively. Also note that the placeholder for addresses is `%p`.
- (b) Check your predictions by running the program.

Activity 2:

Copy `ca21a.cpp` from `get12` to `c:\user`. Load it into Visual Studio as a C project. Answer the following questions.

- (a) What will be displayed on the screen? Show how you determined this.
- (b) Check your predictions by running the program.

Note: this was an exam question from Spring Term, 2002.

Activity 3:

Copy `ca21b.cpp` from `get12` to `c:\user`. Load it into Visual Studio as a C project. Answer the following questions.

- (a) What will be displayed on the screen? Show how you determined this.
- (b) Check your predictions by running the program.

Note: this was an exam question from Fall Term, 2001.

Activity 4:

Copy `rps.cpp` from `get12` to `c:\user`. Load it into Visual Studio as a C project. Run the program and answer the following questions.

- (a) What does this program do?
- (b) How is the random number generator initialized?

- (c) What happens if you comment out the random number initialization (restart and run the program three or four times for three rounds - make note of the computer responses)?
- (d) How does the program convert a random number to Rock, Paper, or Scissors?
- (e) Make a list of questions about the program to which you would like answers.

Turn in: Your handwritten answers to activities 2, 3, & 4.