VSFX 375 – Functions – Exercise 2

DATE DUE: see class notes

Hand in through the Dropbox as per the submission guidelines.

Cavalier King Charles Spaniel Table and Game:

Write a program in C++ that prints the numbers from 1 to 100. But for multiples of four print "Cavalier" instead of the number and for multiples of seven print "King Charles". For numbers which are multiples of both four and seven print "Spaniel".

1. Your program must contain **at least one function** used in a non-trivial way
2. The output should be neatly formatted

Next, allow the player to repeatedly input a number from 1 to 100 and the output is to be the number, Cavalier, King Charles, or Spaniel according to the rules above. Keep track of how many times the word Spaniel is printed and report the result when the player wants to quit the game.

Your program should print the table of results and then repeat the game until the player is ready to quit.

Clarification: Your program must be able to produce a table properly. The game is separate from the table print out and involves responding with a single answer to the number entered and at the end giving the statistical tally of the results.

Submission Guidelines:

If using Visual Studios, submit your files as *F23_V375_E2_LastnameFirstname.zip*
or (dependent on the IDE you have chosen) in a folder *F23_V375_E2_LastnameFirstname*

DO NOT RENAME YOUR PROJECT DIRECTORY, just your zip file.
Visual Studios IDE uses the project name internally and your .sln file will not work properly if you rename the project even if your .cpp file is fine.

Geany requires makefiles only when using multiple files (which will be covered later during the quarter).

Grading Guidelines:

Design and Debugging (30 points)

- 30 points if the program works exactly as stated in the design specifications given.
- 15 points if the program compiles, does not crash, and displays some of the behavior but has some or minor bugs or omissions.
- 0 points if the program does not compile, or compiles but crashes immediately, crashes part way through, or has major bugs or omissions.

Use of loops (20 points)

- 20 points if the program uses loops where appropriate and with correct syntax
- 10 points if the program has bugs with respect to the loops
- 0 points if the program does not use loops correctly

Use of User-Defined Functions (30 points)

- 30 points if functions are used properly
- 15 points if the program has bugs but uses the correct ideas and concepts in the right places
- 0 points if the program does not include any user-defined functions, or uses them incorrectly.

Coding Style (10 points)
Use of Comments (10 points)