Preliminary Probing of Programming Prowess

As we have discussed, due to the fact that the Grade 10 Computer Science course is not a compulsory prerequisite for Grade 11 Computer Science, some of you may have little, or no programming background, while others are quite experienced. For those of you who took Grade 10, we will continue to program in C, but will be switching from DevC++ to an IDE called Code::Blocks. The first step for everyone will be to delete any previous installations of Code::Blocks and reinstall a fresh copy for your work. This MUST be done on a partition of the hard drive of the computer you are working on, which is generally the D drive. You are to also make a folder on the D drive, labeled something similar to "MyName Programming". You will only be able to run your programs from the D drive, but you should get in the habit of backing them up to your P drive. The next step is to follow the appropriate path for yourself based on your programming background.

1. I am Completely New to Programming
In my ICS3U handout folder you will find a folder called "Programming 1" which contains the 15 notes that were used in the Grade 10 course. You should start by working through these notes, in order, to get up to speed with the basics of C. You are free to copy these notes to your home computer and work through them at home too. You should anticipate spending 'homework' time to try to work through these in a timely manner.

2. I Have Some Familiarity with C Programming (or similar background)
For you, the Grade 10 notes should be consider a valuable reference. You are expected to understand the basics of data types, input and output, decision statements and repetitions. You may have some familiarity with arrays, perhaps in treating strings as arrays, and perhaps for storing other data types.
If you feel you are at this level, even if your skills are a bit rusty, you are going to start by developing solutions to the problems listed below. Your programs will be expected to conform to all appropriate programming conventions, from layout, variable type and naming, error trapping, commenting and appropriate use of programming constructs.

Practice Problems for Those who are Stage 2

Write a properly organized and structured C program which allows a user to enter:

1. a low and a high integer and outputs all of the integers from low to high.

2. an integer as displays all of the factors of the number.

3. a single word containing up to 10 letters, and will display the number of letters in the word, as well as the word in completely uppercase and completely lowercase.

4. enter an integer between 1 and 10, and will display that many sets of random numbers for Lotto 6/49 tickets. Each list of 6 random numbers should be in order and can not have repetitions.