763114P   ATK I – Introduction to C-programming Fall 2006 Exercise 1

1. Write a program that calculates the volume of a box. Make variables for the three sides of the box, and one for the volume. Run the program line-by-line and observe how the variables change their values in the Watch-window.

2. Write a program that calculates the seconds in a time interval given in years, days, hours, and minutes. Make variables for the years, days, hours, minutes, and seconds. See how the values of the variables change as the program is running.

3. Write a program that converts temperatures in centigrade to Fahrenheit and Kelvin degrees. Fahrenheit degrees can be obtained from centigrade by first multiplying by 9/5 and then addin 32. Centigrade degrees are converted to Kelvin by addin 217.15.

4. Practise using Unix / Linux environments. Create a directory called *test* in your home directory (*mkdir* command), change into the directory you just created (*cd* command) and write there a short text file called *test.txt* using *pico*. Copy *text.txt* to your home directory, change its name to *new.txt*. In the end, remove all the files and the directories.

5. *Extra*: Do Ex. 1. using Unix / Linux environment via SSH. Also try debugging with *gdb*.

For each task make a new Visual C++ project so that you learn to do that as well.