

Due: Wednesday, Feb 8, 2012, 9:00am

Accepted late until **Friday, Feb 10, 2012, 4:00pm**, subject to a **25% penalty**

The main purpose of this assignment is to demonstrate the concepts that you have learned lecture and lab.

Part A - Temperature Conversion

Write a program that will convert degrees Fahrenheit into degrees Celsius. The formula for this conversion is Fahrenheit temperature minus 32 then multiplied by 5/9. Prompt the user for the temperature in Fahrenheit degrees. Round off to the nearest degree (eg - integers are ok).

Eg -

FtoC: 65 deg F is equal to 18 deg C

Part B - Multiplication Checker

Your ten-year-old child needs help memorizing their multiplication tables (up to 12). You decide to write a program that prompts them for two numbers. The program then waits for them to type an answer. When they give you their answer, the program displays the correct result so that they can see how well they did.

Part C - Formatted Output

For Part C you are to write a program that will generate a receipt from an online soccer store, Just 4 Kicks. This store sells 4 different items to soccer coaches - clipboards (\$3.99 each), whistles (\$6.99 each), pylons (\$1.99 each) and soccer balls (\$17.99 each). The program will prompt the user for the quantity of each purchased item. The receipt will display the total cost of each item, the subtotal, the tax totals (5% GST and 8% GST) and the Grand Total. Use the following output:

item	qty	unit price	total price
clipboard	xx	3.99	\$xxxxxx.xx
whistle	xx	6.99	\$xxxxxx.xx
pylon	xx	1.99	\$xxxxxx.xx
soccer ball	xx	17.99	\$xxxxxx.xx
subtotal:			\$xxxxxx.xx
5% pst			\$xxxxxx.xx
8% gst			\$xxxxxx.xx
grand total			\$xxxxxx.xx

Assignment Submission

- Include a laser or inkjet printed (paper) copy of appropriate printouts (source code and a sample of its execution). Pages should be stapled together at the upper left-hand corner of the page.
- The printouts should be placed in a 9 " x 12" sealed envelope. A standard assignment [coverpage](#) should be printed, signed and stapled to the front of the outside of the envelope. Note: Assignments not including a coversheet will NOT be marked.
- The submission should be placed in the Assignment Box outside of J332, in the slot labeled 1P93, before the due time indicated above. Only one submission (i.e. to the box) should be made per assignment.
- As well, you must submit a softcopy (electronic). To do this, go the appropriate folder for your assignment. At the prompt, execute the command `submit1p93` . Note that it is all lowercase and has no spaces. This command will copy the contents of the current directory to the marker's account. Only submit once.
- Differences between the hardcopy and softcopy submissions will be penalized. They must both be submitted before the due date.
- If you work from home using a different compiler, it is highly recommended that you test your program at Brock using the cc compiler on Sandcastle prior to submitting it, as this will be the compiler used by the marker.
- It is strongly advised that you make a backup copy on the server. Keep this as backup until the end of the semester.

[Computer Science Department](#) | [APCO 1P93 Home Page](#)