DT211/1 Programming Lab Test #3

Date: Thursday, April 18th, 2013 (10.30am – 11.30am)

Requirements:

The following table shows data collected by a meteorological survey over a 1 month period in July

City	avg Temp (C)	avg Rainfall (mm)	Sunshine (hours)
Dublin	14.2	20	167.4
Toronto	20.6	12	226.3
San Francisco	25.1	8	303.8
Tokyo	21.7	10	251.1

- 1. Design a structure template for this data.
- 2. Using the structure template in part (1) above, write a program to do the following:
 - a) Calculate and display the average sunshine <u>per day</u> for each city (note: 31 days in July).
 - b) Calculate and display the average temperature for all the cities.
 - c) Calculate and display the difference between the city with the highest average rainfall and the city with the lowest average rainfall.

Submission details:

- 1. Name your program: labtest3.c
- 2. Submit your program using the labtest listed in the Programming module in Webcourses. This must be submitted on or before 11.30am today in this lab.
- 3. Extra marks will be awarded for well written code (comments, indentation, whitespace, good use of brackets, etc.,).

<u>NB</u> - This is an individual lab test and **NOT** a group one. Any student discovered copying or communicating in any way (electronic, verbal, or otherwise) will immediately fail the lab test and reported to management in the School of Computing. Do your own work!! Please:)