Programming – DT282/1 & DT228/1

Lab 2 – Tuesday, September 27th, 2016

Note: You are expected to finish all programmes in your own time if you do not get these done during the lab session. This is your own responsibility.

- 1. Write a program to do the following:
 - Calculate and display the sum of the integers 1 to 5
 - Calculate and display the average of the following floating-point numbers: 1.0, 1.1, 1.2, 2.0
- 2. Write a program to compute and display on separate lines:
 - the volume
 - the surface area

of a box with height 10cm, length 11.5cm, width 2.5cm

- 3. Write a program to calculate and display the area of a circle with a radius of 4.8 cm. You can assume the value of Π (pi) is 3.14
- 4. Write a program that uses the modulus operator, i.e. % to calculate and display the remainder for the following arithmetic operations:
 - 2 % 2
 - 3 % 2
 - 5 % 2
 - 7 % 3
 - 100 % 33
 - 100 % 7
- 5. Write a program to calculate and display the volume of a cube. The length of all sides of the cube is 2.8 m. Display the volume.
- 6. Write a program to perform the following operations and display the result:
 - 15 + 10
 - 15 − 10
 - 15 * 10
 - 15 / 10
 - 15 % 3

(don't forget to use a variable to store the result of the operation you perform). The <u>type</u> of variable you use is important, depending on the operation you perform, <u>so be careful!!!</u>

Note: make sure you follow the instructions shown to you in the labs on how to use the Borland C++ editor/compiler. Close each file (program) before starting a new file (program) for the next question.