EEET2482/COSC2082 – Software Engineering Design, Advanced Programming Techniques

Exercises - C++ Basics

1. Write a C++ program to ask the user input coefficient values *a b c* of a quadratic equation, then print out all roots.

$$ax^{2} + bx + c = 0$$

2. Write a C++ program to reverse the digits of a given integer.

Sample Input: 123 Sample Output: 321

- 3. Write a function which accept an array of integers and its size then return the maximum value of its elements. Test by calling them in main().
- 4. Write a C++ program that takes in one user input argument from the command line and checks if it is valid hexadecimal number or not, then displays the hexadecimal number to the console.
 - If the incorrect number of user input arguments is detected, the program must exit with an error
 - Hexadecimal values between 0x00 and 0xFF are valid, other values should be rejected
 - The letter "x" of number base can either be upper or lower case
 - The hexadecimal digits can only contain upper case characters.