Supplementary Homework Problem 1

There is a special type of square matrix which is known as a determinant. If you have a determinant which has three elements on a side, such as

| a11 a12 a13 |

| a21 a22 a23 |

| a31 a32 a33 |

You can evaluate the determinant using the following expression:

a11a22a33 + a12a23a31 + a13a21a32 – a11a23a32 – a12a21a33 – a13a22a31

Please write a C++ program, including your own C++ class, as follows. The program accepts integer data for the determinant and uses your C++ class to find the evaluation of the input determinant. Then, it displays the value of the determinant and terminates. Please note, that if the user enters invalid data for any of the entries of the determinant, the program will display an error message and terminate without attempting accept more input and will not attempt to evaluate the determinant.

Please email the source code of your programmed solution to me at [maslanka@bu.edu](mailto:maslanka@bu.edu) by 6:00PM this coming Tuesday, July 19.