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| **Application/ Program name:** | CH12\_EX4.exe |
| **Written by:** | Allen J Myers, Michael Rearden, Robert Hanson |

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| **Purpose or problem definition:** |
| Programming Exercise 11 in Chapter 8 explains how to add large integers using arrays. However, in that exercise, the program could add only integers of, at most, 20 digits. This chapter explains how to work with dynamic integers. Design a class named largeIntegers such that an object of this class can store an integer of any number of digits. Add operations to add, subtract, multiply, and compare integers stored in two objects. Also add constructors to properly initialize objects and functions to set, retrieve, and print the values of objects. |
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| **Program Procedures:** |
| Program takes user input in the form of two large integers, stores them into individual arrays, and takes user choice for how to process the number. System will then output the result from the desired user choice. |
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| **Algorithm/Processing/Conditions:** |
| **Inputs:** |
| User input of two large integers.  User input of a choice for process, either addition, subtraction or multiplication. |
| **Processes:** |
| System will store the user inputted numbers into an array.  System will ask user for a choice in processing.  System will then process the user inputted numbers using the chosen process. System will store the new values to an array. |
| **Outputs:** |
| System will then output the new number to the console for the user to see. |
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| **Notes & Restriction:** |
| Negative numbers need not apply. |
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| **Comments:** |
| Implementation of the largeIntegers program from Chapter 8. |