## **COM S 213 – Fall 2004**

## **Assignment #1**

5 Numbers

Due September 2, 2004

The main purpose of this assignment is to get you experience with a C++ development environment. I use Xcode in class (comes with MacOS X 10.3), but you are free to use CodeWarrior or Visual C++. Be warned that if you choose to use Visual C++ you will need to use some additional include files—see me for details!

Your assignment is to write a small program which reads in 5 numbers and presents the user with a "menu" of operations to perform on these five numbers. The user will be given the option to (1) add the numbers, (2) average the numbers, (3) find the largest number and (4) find the smallest number. You will also give the user the option to exit the program! An interaction with this program might look like this:

```
Please enter 5 integers:
1: 2
2: 4
3: 6
4: 8
5: 10
OK, now what would you like to do?
1> Add the numbers
   Average the numbers
3>
   Find the largest number
4> Find the smallest number
5>
   Ouit
Enter choice> 1
Sum of numbers is: 30
   Add the numbers
1>
2>
   Average the numbers
3>
   Find the largest number
    Find the smallest number
4>
5>
    Ouit
Enter choice> 2
Average of numbers is: 6
   Add the numbers
```

- 2> Average the numbers
- 3> Find the largest number
- 4> Find the smallest number
- 5> Quit

Enter choice> 3 Largest is 10

- 1> Add the numbers
- 2> Average the numbers
- 3> Find the largest number
- 4> Find the smallest number
- 5> Quit

Enter choice> 4 Smallest is 2

- 1> Add the numbers
- 2> Average the numbers
- 3> Find the largest number
- 4> Find the smallest number
- 5> Quit

Enter choice> 6
Invalid entry, please try again

- 1> Add the numbers
- 2> Average the numbers
- 3> Find the largest number
- 4> Find the smallest number
- 5> Quit

Enter choice> 5

You can write this program using material covered in lecture 1. While an array might be an obvious choice for storing the 5 numbers read in, you can use 5 separately declared integer variables instead—since we haven't covered arrays yet.

As a reminder, assignments are turned in on paper with a short writeup. See the Course web site for details on assignment submission.