**Summing Numbers**

1. Write a program Sum.java that just prints the strings that it is given at the command line, one per line. If nothing is given at the command line, print “No arguments”.
2. Modify your program (Make a copy and rename it as Sum1.java) so that it assumes the arguments given at the command line are integers. If there are no arguments, print a message. If there is at least one argument, compute and print the sum of the arguments. Note that you will need to use the parseInt method of the Integer class to extract integer values from the strings that are passed in. If any non-integer values are passed in, your program will produce an error, which is unavoidable at this point.
3. Test your program thoroughly using different numbers of command line arguments.

*Note: command line arguments are those which are passed to the main method. You have to pass all arguments through command line. You cannot use scanner to get input.*

**Exploring Variable Length Parameter Lists**

The file *Parameters.java* contains a program to test the variable length method *average* from Section 7.5 of the text. Note that *average* must be a static method since it is called from the static method *main.*

1. Compile and run the program.
2. Add a call to find the average of a single integer, say 13. Print the result of the call.
3. Add a call with an empty parameter list and print the result. Is the behavior what you expected?
4. Add a method *maximum* that takes a variable number of integer parameters and returns the *maximum* of the parameters. Invoke your method on each of the parameter lists used for the average function.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Parameters.java

//

// Illustrates the concept of a variable parameter list.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

import java.util.Scanner;s

public class Parameters

{

//-----------------------------------------------

// Calls the average method with

// different numbers of parameters.

//-----------------------------------------------

public static void main(String[] args)

{

double mean1, mean2;

mean1 = average(42, 69, 37);

mean2 = average(35, 43, 93, 23, 40, 21, 75);

System.out.println ("mean1 = " + mean1);

System.out.println ("mean2 = " + mean2);

}

//----------------------------------------------

// Returns the average of its parameters.

//----------------------------------------------

public static double average (int ... list)

{

double result = 0.0;

if (list.length != 0)

{

int sum = 0;

for (int num: list)

sum += num;

result = (double)sum / list.length;

}

return result;

}

}