**Homework 6**

**Complete #2 in the Algorithm Workbench on page 221.  Write just the loop here. - 3 points  
     Use the example on page 183 for assistance with #2.**

**2. Design a Do-While loop that asks the user to enter two numbers. The numbers should be added and th e sum displayed. The loop should ask the user whether he or she wishes to perform the operation again. If so, the loop should repeat; other-wise it should terminate.**

**Answer:**

Module main()

Declare String keepGoing

Do

Call showSum()

Display “Do you wish to perform the operation again? (Enter y for yes)”

Input keepGoing

While keepGoing == “y”

End Module

Module showSum()

Declare Real numOne, numTwo, sum

Display “Enter the first number to be totaled.”

Input numOne

Display “Enter the second number for the sum.”

Input numTwo

Set sum = numOne + numTwo

Display “The sum of,” numOne ,” and,” numTwo ,” is:,” sum

End Module

**Convert the loop in #2 to Java.  Use the resource guide to help  you. - 2pts**

**Answer:**

double numOne;

double numTwo;

double sum;

Scanner scan = new Scanner (System.in);

System.out.println (“Enter the first number to be totaled.”);

numOne = scan.nextDouble();

System.out.println (“Enter the second number for the sum.”);

numTwo = scan.nextDouble();

(

sum = numOne + numTwo;

)

System.out.println (“The sum of both your numbers is: “ sum);

**Complete #9 in the Algorithm Workbench on page 221.  Write just the loop here. - 3 points  
     The For loop construct is demonstrated around page 192.**

**Answer:**

Declare Integer counter

Constant Integer MAX\_VALUE = 50

For counter = 0 To MAX\_VALUE Step 1

Display counter

End For

**Convert the loop in #9 to Java.  Use the resource guide to help you. - 2pts**

int counter;

final int MAX = 50;

for (counter = 0; counter <= MAX; counter = counter + 1)

System.out.println(counter);

**Complete #4 in the Programming Exercises on page 223.  Write just the loop here - 4 points.  
     Use the sample code on page 209 for assistance with #4.**

**Sum of Numbers: Design a program with a loop that asks the user to enter a series of positive numbers. The user should enter a negative number to signal the end of the series. After all the positive numbers have been entered, the program should display their sum.**

**Answer:**

Declare Integer positive

Declare Integer total = 0

Declare Integer counter

Display “This program totals positive numbers, enter a negative number to signal the end of the series.”

WHILE number >= 0

Do

For counter = 1 TO 5

Display “Enter a number.”

Input positive

Set total = total + positive

End For

Display “The total is “, total

**Convert the loop in #4 to Java.  Use the resource guide to help you. - 2pts**

**Answer:**

Int positive;

Int total;

Int counter;

System.out.println (“This program totals positive numbers, enter a negative number to signal the end of the series.”);

for (counter = 1; counter <= 5;)   
 {  
 System.out.println (“Enter a number”);

positive = scan.nextDouble();

(

total = total + positive;

)

System.out.println (“The total is: “ total);

}//end for