- 1. Write a method that takes three doubles as parameters to represent three temperatures. The method
  - a) calculates the average of the three temperatures
  - b) returns a String depending on the average temperature:

```
"FREEZING", if the average temperature is less than 0.
```

"COLD", if the average temperature lies between 1 and 9.

"MODERATE", if the average temperature lies between 9 and 16.

"WARM", if the if the average exceeds 16

Write a program that reads in three temperatures from the user, then calls this method

2. Write a method that takes three double parameters to represent the price of three different books. The method returns the total price of these books. If the total price is greater than 50.00 a 10% discount will be given.

Write a Java program that

- a) reads in the price of 3 different books from the user
- b) calls this method to get the total amount owed
- c) displays this total
- 3. Write a java program with the following methods:
  - findInArray which will accept an array of integers, and an integer value. The method should search the array for the value, and return its position. The method should return -1 if the value is not found.
  - findLargest which will accept an array of integers and will return the highest value in the array.
  - countValues which will accept an array of integers and a value to count. The method will return the number of times that value is in the array.

Test each of your methods by calling them from the main method.

## Past Paper Questions

Given each of the method signatures shown below, write the Java code to call or invoke each method correctly.

```
public static double calcAreaCircle(double radius)
public static void displayMenu()
public static char sortLetters(char a, char b)
```

Given the following valid method calls, write the method signature for each method.

```
double expenses = calcExpenses(miles, rate);
if( isCorrect()) System.out.print("Well Done");
displayDiff(12, 7);
```