1. (2 pts) Suppose we want to write a method that will accept any number of int parameters and return the sum of the parameters. Show the declaration and body of the method.

```java
public static int sum(int... array) {
    int sum = array[0];
    for (int number : array)
        sum += number;
    return(sum);
}
```

2. (2 pts) How many compile-time errors are there in the following code? What are the compile-time errors?

```java
final int i = 1;
final int j;
i = 2;
j = 2;
```

There will be one compile-time error. Since the final int it has already been given the value 1, we cannot assign 2 to it. However, since j was not given an initial value when it was declared, there is no compile-time error when 2 is assigned to it.

3. (2 pts) The Linear search technique involves starting at the beginning of an array and searching until we either find what we are looking for or reach the end of the array, and the Binary search technique involves beginning with a sorted array and examining the midpoint to either locate what we are looking for or eliminate half of the array.

4. (2 pts) What are two techniques for sorting an array of elements?

Selection Sort and Bubble Sort

5. (2 pts) Suppose we have a method that accepts an int[] as parameter. Show the content of the method so that the contents of the array will be reversed. That is, if 1,2,3,4,5 is the array sent to the method, after the method executes, the contents will be 5,4,3,2,1. (There are two bonus points associated with this problem.)

```java
public static void reverse(int[] array) {
    for (int counter=0;counter<array.length/2;counter++) {
        int temp = array[counter];
        array[counter] = array[array.length-1-counter];
        array[array.length-1-counter] = temp;
    }
}
```