Instructions: Using the sample source code files that can be found here, complete the following problems.

Submission: Save the answers to this activity as a PDF file and upload it to Canvas. Only include the code you wrote for each problem, and not the whole class.

Problem 1: Using the Java class Activity4_P1.java, complete the code necessary so that the printArray() method prints the contents of the received array.

```
/**
 * This method should print the contents of the array received.
 * @array Input array to be printed
 */
public static void printArray(int[] array) {
        //complete code here

}
```

Problem 2: Using the Java class Activity4_P2.java, complete the code in the method compareArray() so that it compares the contents of two different arrays. Remember that arrays are objects, and cannot be compared directly using the equality (==) operator.

```
/**
 * Compares array a with array b. The result is true if and only if the
 * size of both arrays is the same, and the contents of each index are equal.
 * @param a
 * @param b
 * @return True if both arrays are equal, false if they are different.
 */
public static boolean compareArrays(char[] a, char[] b){
    //complete code here
    return true;
}
```

Problem 3.1: Using the Java class Activity4_P3.java, complete the code in method findElement() to return an array of integers with all the indexes where the target String is found.

```java
/**
 *
 * @param input Array of Strings containing a list of words
 * @param target String value to be searched
 * @return Array with the list of indexes where the "target" String can be found on array "input".
 */
public static int[] findElement(String[] input, String target) {
    //Complete the code here
    return null;
}
```

For example:

```java
String[] test1 = {"the", "brown", "fox", "jumps", "over", "the", "lazy", "dog" };
int[] results1 = findElement(test1, "the"); // Expected answer [0,5]
```

Problem 3.2: Add 4 test cases on the main() method to cover different possible execution scenarios. Try to think about edge cases (empty arrays, empty Strings, etc.) that you need your program to cover.