Structured and Object Oriented Programming
Laboratory #4
Functions for arrays

The class ArrayPack contains a set of functions used for processing of integer arrays.
1. Do not change the method's names.
2. Pay attention to the argument's types, you are not allowed to change them.

```java
import java.util.Scanner;

public class ArrayPack {
        private static Scanner scKeyboard= new Scanner(System.in);

        /* input data from standard input, if there is not enough data fill
         * the remaining elements with 0's.
         * Stop reading the numbers after filling the array.
         * All tokens that do not represent a number must be ignored
         */

        public static int[] readArray(int size) {
        // input your code here, use the scKeyboard to read data
        // skip all tokens that do not represent numbers
        }
        public static int[] appendArrays(int [] a1, int [] a2) {
        // input your code here
        }
        public int getMinimalElement(int [] inArr) {
                // input your code here
        }
        // resulting array should contain all elements have the minimal value
        public int[] getMinimalElements(int [] inArr) {
                // input your code here
        }
        // resulting array should contain elements that are >= limit
        public int[] getGreaterThan(int[] inArr, int limit) {
                // input your code here
        }
        // resulting array should contain elements that are >= lowrLimit and <=upperLimit
        public int[] getRange(int[] inArr, int lowerLimit, int upperLimit) {
                // input your code here
        }
        public int elementCount(int[] inArr, int what2Look4) {
                // input your code here
        }
        // resulting array contains elements that are in exactly one array
        public static int[] uniqueElements(int [] a1, int [] a2) {
                // input your code here
        }
        // resulting array should contain elements that are in both arrays
        public static int[] commonElements(int [] a1, int [] a2) {
                // input your code here
        }
        public static void reverseMe(int[] inOutArr) {
                // input your code here, modify the input array
        }
        // return an array with elements in reversed order
        public static int[] returnReversed(int[] inArr) {
                // input your code here, keep the input array intact
        }
        public static void showArr(int [] arrIn, int numberOfColumns) {
                // input your code here
```

```java
        }

        public static void main(String[] args) {
                // Test calls to all above methods
                // Except for the readArray method use initialized arrays for testing.
                // input your code here, modify the input array
        }

}
```

## Remarks:
1. The intended way of operation of a method is clearly indicated by its name.
2. Do not forget about calling the methods to test their behaviour.
3. Pay attention to the type of each method and the arguments' types.

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