Problem 1
Write a program which, in a given array of **int**s, swaps the first odd element with the
last even element. Print the array before and after the operation. If all elements are
even or all are odd, the program should print an appropriate message.

Problem 2
Define in a program an array of non-negative integers, for example

```
int[] arr = {1, 5, 8, 2, 6};
```

and then print a vertical 'histogram' of data contained in the array, i.e., in subsequent
columns as many asterisks as is the value of subsequent element of the array (columns
aligned at the bottom). For the data as above, the program should print:

```
    *
    *
    *     *
*   *     *
*   *     *
*   *     *
*   *   * *
*   *   * *
```

Problem 3
Write a program which rotates a given array of **int**s by one position to the left, i.e.,
the first element is replaced by the second, the second by the third etc., and the last
by the first. For example, the array

```
1 2 3 4 5
```

after rotation should become

```
2 3 4 5 1
```

Do not create any auxiliary arrays or Strings!

Problem 4
Write a program which defines *two* arrays of **int**s and prints all elements of the
first array which *do not* appear in the second, but each value once only, without
repetitions.
For example for arrays

```
int[] arr = { 4,3,4,3,6,7,4,8,2,9 };
int[] brr = { 2,3,6,8,1,5 };
```

the result could be (the order of printed values is irrelevant):

```
7 4 9
```

Do not create any auxiliary arrays, collections or **Strings**. Do not use any classes from packages other than the standard *java.lang*. The arrays cannot be modified (in particular, they cannot be sorted).