ARRAY PARAMETERS

zyBook 7.1, zyBook 7.6

PASSING PARAMETERS

- When a primitive data type is passed as a parameter, the value is copied.

- When an object is passed as a parameter, the reference is copied.

  - When you pass an array as a parameter, the method has the ability to change the contents of the array.

```java
import java.util.Arrays;

public class ArrayParameters {
    public static void main(String[] args) {
        int[] list = new int[10];
        System.out.println("After construction: " + Arrays.toString(list));
        for (int i = 0; i < list.length; i++) {
            list[i] = 2 * i + 1;
        }
        System.out.println("After loop:         " + Arrays.toString(list));
        incrementAll(list);
        System.out.println("After incrementAll: " + Arrays.toString(list));
    }

    public static void incrementAll(int[] data) {
        for (int i = 0; i < data.length; i++) {
            data[i]++;
        }
    }
}
```

```
$ java -cp bin ArrayParameters
After construction: [0, 0, 0, 0, 0, 0, 0, 0, 0, 0]
After loop:         [1, 3, 5, 7, 9, 11, 13, 15, 17, 19]
After incrementAll: [2, 4, 6, 8, 10, 12, 14, 16, 18, 20]
```