

Array Processing – Part III: Copying Arrays

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Objectives

- To copy contents from one array to another (§7.5)

Copying Arrays

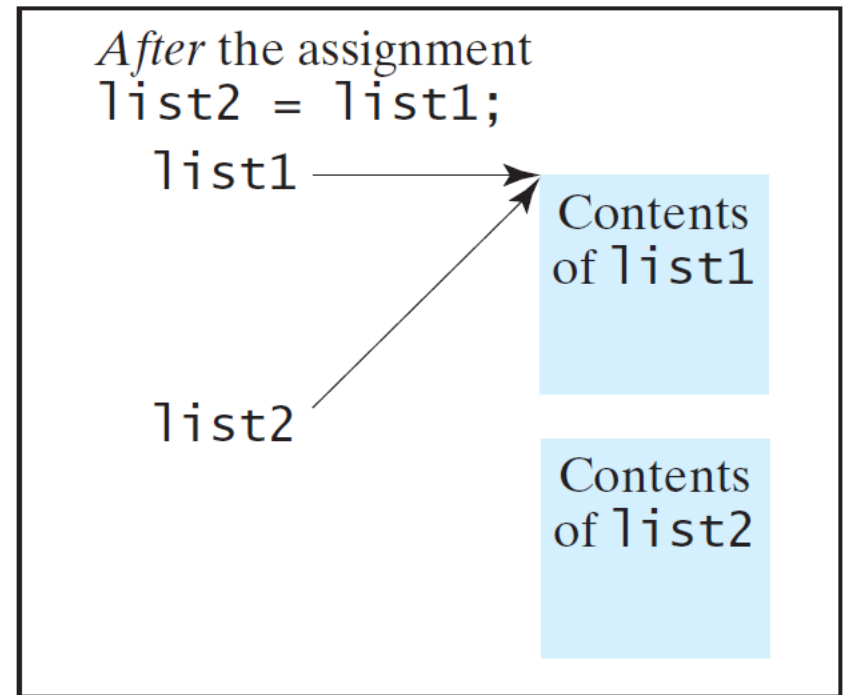
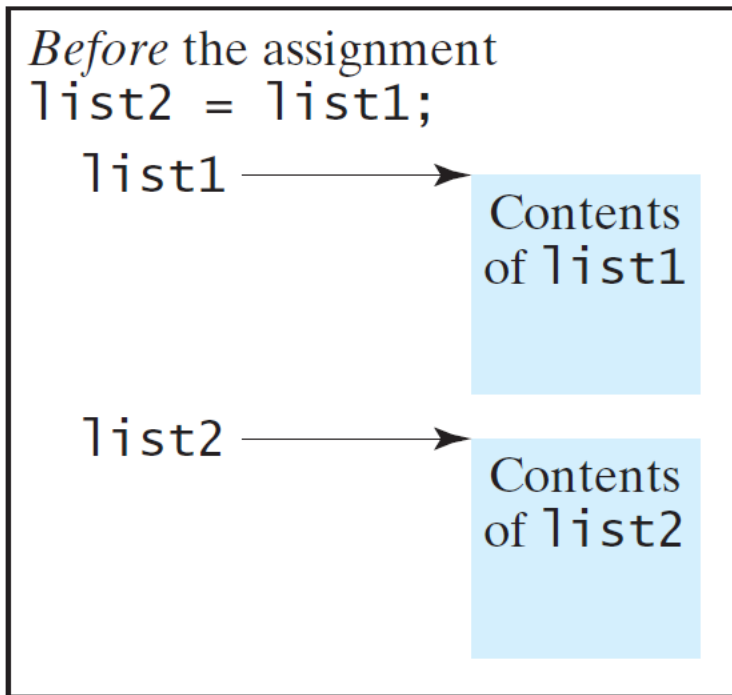
- Often, in a program, you need to duplicate an array or a part of an array.
- How?

How about this?

```
list2 = list1;
```

How about this?

`list2 = list1;`



Copying Arrays Using Loop

- Using a loop:

```
int[] sourceArray = {2, 3, 1, 5, 10};
```

```
int[] targetArray = new int[sourceArray.length];
```

```
for (int i = 0; i < sourceArray.length; i++) {
```

```
    targetArray[i] = sourceArray[i];
```

```
}
```

Copying Arrays Using `System.arraycopy`

- The `System.arraycopy` method

```
arraycopy(sourceArray, src_pos, targetArray, tar_pos,  
length);
```

- Example:

```
System.arraycopy(sourceArray, 0, targetArray, 0,  
sourceArray.length);
```

Questions?