EXAMPLE 30: OBJECTS AND ARRAYS ARE 'PASSED-BY-REFERENCE' TO FUNCTIONS

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OBJECTS AND ARRAYS - UNLIKE NUMBERS OR STRINGS - ARE PASSED IN "AS-IS" TO FUNCTIONS

SO THE FUNCTION WORKS WITH THE ORIGINAL - NOT A COPY

EXAMPLE 30: OBJECTS AND ARRAYS ARE 'PASSED-BY-REFERENCE' TO FUNCTIONS

OBJECTS AND ARRAYS - UNLIKE NUMBERS OR STRINGS - ARE PASSED IN

SO THE FUNCTION WORKS

IF THE FUNCTION MODIFIES THE VARIABLE, THE ORIGINAL IS INDEED CHANGED!

```
function modifyX(rectangle, weekDays) {
  rectangle.length = rectangle.length * 2;
  weekDays.push('Manic Mondays!!');
}
```

function reassignX(rectangle, weekDays) {
 rectangle = new Rectangle(5,5,"Red");
 weekDays = ['Sat','Sun'];

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    IF THE FUNCTION REASSIGNS THE

VARIABLE, THE ORIGINAL IS NOT CHANGED!
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BUT

```
IF THE FUNCTION MODIFIES THE VARIABLE,
```

```
function modify*(castangle AvectSaxs) function modify*(castangle AvectSaxs) function modify*(castangle AvectSaxs) function f
```

```
function reassignX(rectangle, weekDays) {
  console.log("Before re-assigning (inside function) - variables have values
= " + rectangle.length + " and " + weekDays);
  rectangle = new Rectangle(5,5,"Red");
  weekDays = ['Sat','Sun']
  console.log("After function) | KeekDays", STHE - variables have values
= " + rectangle.length function) | KeekDays", STHE - variables have values
= " + rectangle.length function) | VARIABLE, THE ORIGINAL IS NOT CHANGED!
```

```
var Wektangle1 | hew Rectangle(5, 5, "Blue");
var weekDays = ['Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri'];
console.log("Initial values (in calling function) : " + rectangle1.length
+ " and " + weekDays);
console.log("Final values (in calling function) : " + rectangle1.length +
" and " + weekDays);
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Initial values (in calling function) : 5 and Sun,Mon,Tue,Wed,Thu,Fri

Before modifying (inside function) - variables have values = 5 and Sun,Mon,Tue,Wed,Thu,Fri

After modifying (inside function) - variables have values = 10 and Sun,Mon,Tue,Wed,Thu,Fri,Manic Mondays!!

Final values (in calling function) : 10 and Sun,Mon,Tue,Wed,Thu,Fri,Manic Mondays!!
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Before re-assigning (inside function) - variables have values = 5 and Sun,Mon,Tue,Wed,Thu,Fri

After re-assigning (inside function) - variables have values = 7 and Sat,Sun
Final values (in calling function) : 5 and Sun,Mon,Tue,Wed,Thu,Fri
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    After re-assigning (inside function) - variables have values = 7 and Sat,Sun
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