2D associative array:

```
session start();
//first book:
$value = array();
$value["qty"] = "1";
$value["isbn"] = $ISBN;
$value["total"] = $price;
$value["id"] = $id;
$cart = array();
$cart[$title] = $value;
$ SESSION["cart"] = $cart;
echo (toXml($cart));
```

Notes:

```
//We have:
$cart[$title] ["qty"] = "1";
$cart[$title] ["isbn"] = $ISBN;
$cart[$title] ["total"] = $price;
$cart[$title] ["id"] = $id;
e.g. if the book title is "java", we have:
$cart["java"] ["qty"] = "1";
$cart ["java"] ["isbn"] = $ISBN;
$cart ["java"] ["total"] = $price;
$cart ["java"] ["id"] = $id;
$price must be a number. i.e. 39.99 Not $39.99
Otherwise, after multiplication, the result becomes 0
```

```
//add one more for the book
$value = $cart[$title];
$value["qty"] = $value["qty"] + 1;
$value["total"] = $price*$value["qty"];
$cart[$title] = $value;
$_SESSION["cart"] = $cart;
echo (toXml($cart))
```

```
function toXml($shop_cart) {
//$Item is a key - title
//$ItemName is the value
//$shop_cart is a 2D assoc array
foreach ($shop_cart as $Item => $ItemName) {
// $Item -> title e.g. "java"
//$ItemName[isbn] →ISBN
// 1/\sqrt{1000}
```