

```
1  let cart = {
2
3    items: [
4
5      { id: 1, name: 'Laptop', price: 60000, quantity: 1 },
6
7      { id: 2, name: 'Mouse', price: 800, quantity: 2 }
8    ]
9  };
10
11 console.log(cart);
12
13 // Pass by reference: modifies shared cart object
14
15 function updateQuantity(itemId, change) {
16
17   let item = cart.items.find(i => i.id === itemId);
18
19   if (item) {
20
21     item.quantity = Math.max(1, item.quantity + change); // min 1
22   }
23
24   render();
25 }
26
27 // Pass by value: calculates total without changing actual prices
28
29 function calculateDiscountedTotal(discountPercent) {
30
31   let total = 0;
32
33   cart.items.forEach(item => {
34
35     let discountAmount = (item.price * discountPercent) / 100;
36
37     let finalPrice = item.price - discountAmount;
```

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38
39     total += finalPrice * item.quantity;
40 });
41
42     return total;
43 }
44
45 // Render Cart Page
46
47 function renderCartPage() {
48
49     const cartDiv = document.getElementById('cartItems');
50
51     cartDiv.innerHTML = '';
52
53     cart.items.forEach(item => {
54
55         const itemDiv = document.createElement('div');
56
57         itemDiv.className = 'item';
58
59         itemDiv.innerHTML = `
60
61             <span class="item-name">${item.name} <br>₹${item.price}</span>
62
63             <div class="qty-controls">
64
65                 <button onclick="updateQuantity(${item.id}, -1)">-</button>
66
67                 <span>${item.quantity}</span>
68
69                 <button onclick="updateQuantity(${item.id}, 1)">+</button>
70
71             </div>
72         `;
73
74         cartDiv.appendChild(itemDiv);
75     });
```

```
76 }
77
78 // Render Checkout Page
79
80 function renderCheckoutPage() {
81
82     const checkoutDiv = document.getElementById('checkoutItems');
83
84     checkoutDiv.innerHTML = '';
85
86     cart.items.forEach(item => {
87
88         const itemDiv = document.createElement('div');
89
90         itemDiv.className = 'item';
91
92         itemDiv.innerHTML = `
93
94             <span>${item.name}</span>
95
96             <span>x ${item.quantity}</span>
97         `;
98
99         checkoutDiv.appendChild(itemDiv);
100     });
101
102     // Calculate discounted total
103
104     const total = calculateDiscountedTotal(10); // 10% off
105
106     document.getElementById('discountedTotal').textContent = `Total Price (10% Off): ₹${total}`;
107 }
108
109 // Render both pages
110
111 function render() {
112
113     renderCartPage();
```

```
114  
115     renderCheckoutPage();  
116 }  
117  
118 // Initial render  
119  
120 render();
```