

LEARNING

1. Conditional statement in JavaScript: <https://www.freecodecamp.org/news/javascript-if-else-and-if-then-js-conditional-statements/>
2. Loop & iteration in JavaScript: https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Loops_and_iteration

TASK

1. Update your book purchasing function to have parameter amount of stock & amount of purchased book. Then calculate total price & display the result.

Note:

The function must have at least:

- for loop iteration
- break when amount of book is already out of stock
- Display text if amount of book after purchasing can be purchased again or not

The screenshot shows a web browser window with a single tab titled 'Book Purchase'. The address bar shows the file path 'D:/MAGANG%20ZETTABYTE/Day%207/index.html'. The page content is divided into two main sections: 'Book List' and 'Book Purchase'.

Book List

Book Title	Price (IDR)	Stock	Tax (%)
Book 1	Rp 100.000,00	5	5%
Book 2	Rp 75.000,00	10	2%
Book 3	Rp 120.000,00	8	3%
Book 4	Rp 90.000,00	15	2%
Book 5	Rp 110.000,00	12	4%

Book Purchase

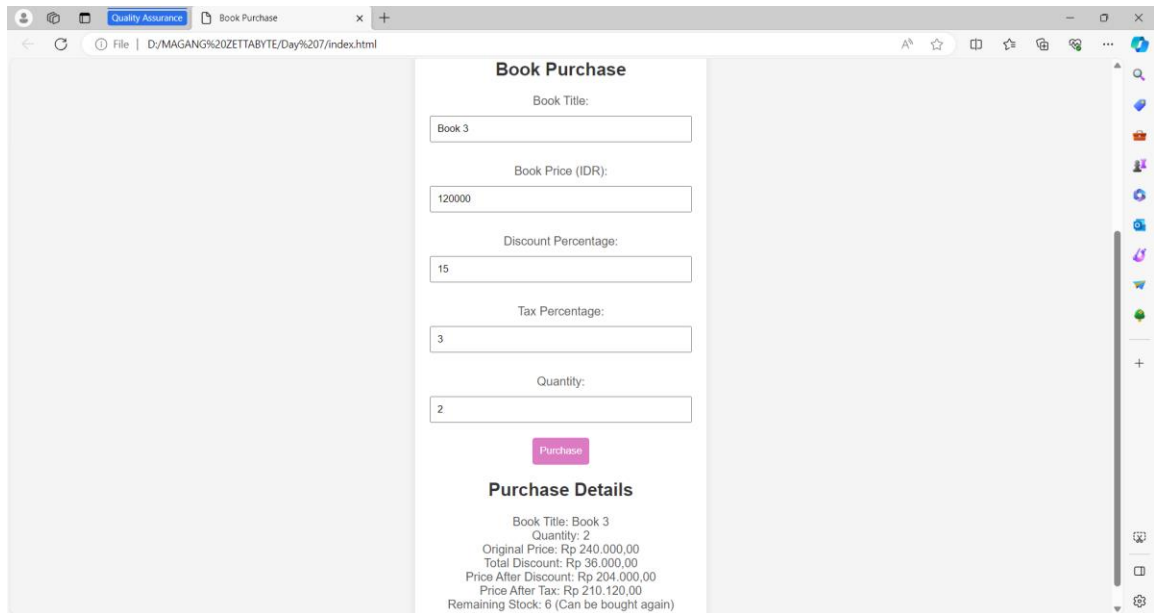
Book Title:

Book Price (IDR):

Discount Percentage:

Tax Percentage:

Quantity:



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Book Purchase</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f4f4f4;
      margin: 0;
      padding: 0;
      display: flex;
      align-items: center;
      justify-content: center;
      min-height: 100vh;
    }
    .container {
      max-width: 600px;
      background-color: #fff;
      padding: 20px;
      box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
      border-radius: 8px;
      text-align: center;
    }
    h1 {
      color: #333;
    }
    label {
```

```

        display: block;
        margin: 10px 0;
        color: #555;
    }
    input {
        width: 100%;
        padding: 8px;
        box-sizing: border-box;
        margin-bottom: 20px;
    }
    button {
        background-color: #dd7ac4;
        color: #fff;
        padding: 10px;
        border: none;
        cursor: pointer;
        border-radius: 4px;
    }
    button:hover {
        background-color: #65a4ce;
    }
    h2 {
        margin-top: 20px;
        color: #333;
    }
    p {
        color: #555;
    }
    table {
        width: 100%;
        margin-top: 20px;
        border-collapse: collapse;
    }
    th, td {
        border: 1px solid #ddd;
        padding: 8px;
        text-align: left;
    }
</style>
</head>
<body>
<div class="container">
    <h1>Book List</h1>
    <table>
        <thead>

```

```

        <tr>
            <th>Book Title</th>
            <th>Price (IDR)</th>
            <th>Stock</th>
            <th>Tax (%)</th>
        </tr>
    </thead>
    <tbody id="bookTableBody">
        <!-- Add book entries dynamically using JavaScript -->
    </tbody>
</table>

<h2>Book Purchase</h2>

<label for="bookTitle">Book Title:</label>
<input type="text" id="bookTitle" placeholder="Enter book title">

<label for="bookPrice">Book Price (IDR):</label>
<input type="number" id="bookPrice" placeholder="Enter book price">

<label for="discountPercentage">Discount Percentage:</label>
<input type="number" id="discountPercentage" placeholder="Enter discount
percentage">

<label for="taxPercentage">Tax Percentage:</label>
<input type="number" id="taxPercentage" placeholder="Enter tax percentage">

<label for="quantity">Quantity:</label>
<input type="number" id="quantity" placeholder="Enter quantity">

<button onclick="calculatePrice()">Purchase</button>

<h2>Purchase Details</h2>
<p id="purchaseDetails"></p>
</div>

<script>
    const bookList = [
        { title: 'Book 1', price: 100000, stock: 5, tax: 5 },
        { title: 'Book 2', price: 75000, stock: 10, tax: 2 },
        { title: 'Book 3', price: 120000, stock: 8, tax: 3 },
        { title: 'Book 4', price: 90000, stock: 15, tax: 2 },
        { title: 'Book 5', price: 110000, stock: 12, tax: 4 },
    ];

```

```

function displayBookList() {
    const bookTableBody = document.getElementById('bookTableBody');

    bookList.forEach(book => {
        const row = document.createElement('tr');
        row.innerHTML = `
            <td>${book.title}</td>
            <td>${formatCurrency(book.price)}</td>
            <td>${book.stock}</td>
            <td>${book.tax}%</td>
        `;
        bookTableBody.appendChild(row);
    });
}

function formatCurrency(amount) {
    return new Intl.NumberFormat('id-ID', { style: 'currency', currency: 'IDR'
}).format(amount);
}

displayBookList(); // Call the function to display the book list

function calculatePrice() {
    const bookTitle = document.getElementById('bookTitle').value;
    const quantity = parseInt(document.getElementById('quantity').value);
    const selectedBook = bookList.find(book => book.title === bookTitle);

    if (selectedBook && quantity > 0 && quantity <= selectedBook.stock) {
        // Perform calculations
        const bookPrice = selectedBook.price;
        const discountPercentage =
parseFloat(document.getElementById('discountPercentage').value);
        const taxPercentage =
parseFloat(document.getElementById('taxPercentage').value);

        const discountAmount = (discountPercentage / 100) * bookPrice;
        const priceAfterDiscount = bookPrice - discountAmount;

        const taxAmount = (taxPercentage / 100) * priceAfterDiscount;
        const priceAfterTax = priceAfterDiscount + taxAmount;

        const originalPrice = quantity * bookPrice;
        const totalDiscount = quantity * discountAmount;
        const totalPriceAfterDiscount = quantity * priceAfterDiscount;
        const totalPriceAfterTax = quantity * priceAfterTax;
    }
}

```

```

// Update stock after purchase
selectedBook.stock -= quantity;

const purchaseDetails = `
    Book Title: ${bookTitle}<br>
    Quantity: ${quantity}<br>
    Original Price: ${formatCurrency(originalPrice)}<br>
    Total Discount: ${formatCurrency(totalDiscount)}<br>
    Price After Discount: ${formatCurrency(totalPriceAfterDiscount)}<br>
    Price After Tax: ${formatCurrency(totalPriceAfterTax)}<br>
    Remaining Stock: ${selectedBook.stock} ${selectedBook.stock > 0 ? '(Can
be bought again)' : '(Out of stock)'}
`;

document.getElementById('purchaseDetails').innerHTML = purchaseDetails;
} else {
    document.getElementById('purchaseDetails').innerHTML = 'Invalid input or
insufficient stock.';
}
}
</script>
</body>
</html>

```

Logic Test

1. Missing Number: <https://drive.google.com/file/d/1ecLxb2sJMTx1Twkvci-xRhVNlp1KV0wx/view>

```

Unique Characters.js
1 function hasUniqueCharacters(str) {
2
3     let charMap = {};
4
5     for (let char of str) {
6         if (charMap[char]) {
7             return false;
8         }
9         charMap[char] = true;
10    }
11    return true;
12 }
13
14 console.log(hasUniqueCharacters("abcdefg"));
15 console.log(hasUniqueCharacters("hello"));
16

```

```

[Running] node "d:\VAGANG ZETTABYTE\Day 7\Unique Characters.js"
true
false
[Done] exited with code=0 in 0.198 seconds

```

```
function hasUniqueCharacters(str) {  
  
    let charMap = {};  
  
    for (let char of str) {  
        if (charMap[char]) {  
            return false;  
        }  
        charMap[char] = true;  
    }  
    return true;  
}  
  
console.log(hasUniqueCharacters("abcdefg"));  
console.log(hasUniqueCharacters("hello"));
```

Output:

true

false