Switch case statement in JavaScript

To perform a multiway branch operations having multiples expressions we may use multiple if...else...if statements when operations to be performed on only one condition. To do similar task in easier manner switch case statement may be used. Switch case do this kind of executions more efficiently than repeated if...else if statements.

The objective of a switch statement is to give an expression to evaluate and several different statements to execute based on the value of the expression. The system checks each case against the value of the expression until a match is found. If nothing matches, a default condition will be used.

The following flowchart shows the switch case:

```
Syntax
switch (expression) {
    case condition 1: code_block1
    case condition 2: code_block2
    case condition 3: code_block3
    default: code_block_in_default
}
```
break;

case condition 2: code_block2
break;
...

case condition n: code_block3
break;
....
....

default: code_block
}

The **break** statements indicate the end of a particular case, once a condition is matched, if break is specified, the execution of remaining code of switch is not executed and control transfers after the statement of switch case. If break is omitted, system will check each code block in each of the remaining cases.

**Example**

```html
<html>
<head>
</head>
<body>
<h2>Book Library</h2>
<script>
    var book = "math";
    document.write("Entering to switch block<br />
    case "math": document.write("Maths books<br />
    break;

    case "science": document.write("Science Books<br />
    break;

    case "history": document.write("History Book<br />
    break;

    case "computer": document.write("Computer Book<br />
    break;

    case "hindi": document.write("Hindi Book<br />
    break;

    default: document.write("Unknown book<br />
    
    document.write("<br />Exiting switch block<br />
</script>
<p>We may set the book variable to different value and then try...</p>
</body>
</html>
```
Break statements play a major role in switch-case statements. The following code that uses switch-case statement without any break statement.

```html
<html>
<body>
<h2>Book Library -- without break</h2>
<script>
  var book = "math";
  document.write("Entering to switch block without break<br /><br />
  switch (book) {
    case 'math': document.write("Maths book<br />
    case 'science': document.write("Science Books<br />
    case 'history': document.write("History Book<br />
    case 'computer': document.write("Computer Book<br />
    case 'hind': document.write("Hindi Book<br />
    default: document.write("Unknown book<br />
  }
  document.write("<br />Exiting switch block"
</script>
<p>We may set the book variable to different value and then try...</p>
</body>
</html>
```
Output

Book Library -- without break

Entering to switch block without break

Maths book
Science Books
History Book
Computer Book
Hindi Book
Unknown book

Exiting switch block

We may set the book variable to different value and then try...

Assignment

1. What is switch-case statement?

2. What is the use of break in switch? Explain.