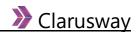
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Hands-on JavaScript Loops



Purpose of the this hands-on training is to teach the students JavaScript Loops.

Learning Outcomes

At the end of the this hands-on training, students will be able to use;

```
• What is Loops?
```

- for Loops
- while Loops
- do ... while Loops
- for ... in Loops
- for ... of Loops

Part 1 - What is Loops?

• JavaScript Loops offer a quick and easy way to do something *repeatedly*. If you want to run the same code over and over again, you can use **Loops**.

```
console.log("ClarusWay");
console.log("ClarusWay");
console.log("ClarusWay");
console.log("ClarusWay");
console.log("ClarusWay");
console.log("ClarusWay");
console.log("ClarusWay");
console.log("ClarusWay");
// Expected Output : 8 Clarusway
```

Part 2 - for Loops

- A for loop repeats until a specified condition evaluates to false. The JavaScript for loop is similar to the Java and C for loop.
- The javascript for statement consists of three expressions and a statement.

Syntax:

```
for (initialExpression; conditionExpression; incrementExpression) {
   repeatedStatement;
}
```

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Part 3 - for ... in Loops

• The for ... in loop is a special type of a loop that iterates over the properties of an object, or the elements of an array.

Syntax:

```
for (variable in object) {
  repeatedStatement;
}
```

Part 4 - for ... of Loops

• **ES6** introduces a new for ... of loop which allows us to iterate over arrays or other iterable objects (e.g. strings) very easily. Also, the code inside the loop is executed for each element of the iterable object.

Syntax:

```
for (variable of object) {
  repeatedStatement;
}
```

Part 5 - while Statement

• The while loop starts by evaluating the condition. If the condition is true, the statement(s) is/are executed. If the condition is false, the statement(s) is/are not executed. After that, while loop ends.

Syntax:

```
while (condition) {
  repeatedStatement;
}
```

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Part 6 - do ... while Statement

The do...while loop is closely related to while loop. But in the do ... while loop, the condition is checked at the end of the loop. Because of that the statement will executed at least once before check the condition.

Syntax:

```
do {
   repeatedStatement;
} while (condition);
```