



Javascript - Loops

- Aditya Kumar
Chief Technology Officer, edwisor.com

We will start with the following concepts

- 1) What are loops?
- 2) For loop
- 3) While loop
- 4) For in loop
- 5) Breaking the loop

Sometimes we like to repeat instructions!

But do we really like repeating?

- Let's look at some of the possible real life conditions that we can have -
 - Mark all my old customers as special customers
 - Give a copy of this assignment/note to all the fourth year students
 - While the temperature is less than x degrees, keep serving hot food.
 - Find the total skill score of all the skill levels of this candidate

The way this is written in programming world is quite simple

- We use loop statements to repeat blocks of code based on some condition.
 - “**for**” loop runs for a specified number of times.
 - “**while**” loop runs till the time a certain condition is true.
 - “**for/in**” loops through properties of an object.
- Let's see examples on how to use them in our programs

For loop is the easiest and the most famous loop

```
for (statement 1; statement 2; statement 3) {  
    code block to be executed  
}
```

- Statement 1 is executed before the loop (code block to be executed) starts. So it's the entry statement.
- Statement 2 defines the condition which decides when the loop will exit or how long it will run.
- Statement 3 is mostly used for modifying the counter variable or variable involved in statement 2 condition. It is optional.

While loop runs through a block of code till the time a particular condition is true

```
while (condition) {  
    code block to be executed  
}
```

- Unlike for loop, if you want to change the variable involved with the condition, you will have to do it separately.
- In most cases, that variable is automatically depreciated bases on program conditions.

What if we want to break a loop in between!

- We use “break” statement for breaking a loop operation in between
- Lets see how to use it.

For/In loop is a special loop

- Its meant to iterate over Objects or Arrays.
- Lets see a few examples to understand
- In your real life programming, you may find this loop more often than expected.

Some Dos and Don'ts

- Always make sure your looping conditions are not ending into an infinite loop
- Don't write very big loops.
- Don't perform heavy functions inside a loop.

The next steps are ...

- Functions in Javascript