

Reverse of a number

Below are the steps for reversing the digits of a number. These steps are to be repeated until the digits are reversed completely. For example, given a number, var num = 43875. We need to have two additional variables: var r and var sum = 0. We initialize them as follows:

```
var num = 43875;  
var r;  
var sum = 0;
```

The steps to be repeated are:

```
r = num % 10;  
sum = sum * 10 + r;  
num = parseInt(num / 10);
```

Determine the values of r, sum and num in each step in the table below:

| <i>1st Iteration</i> | <i>r</i> | <i>sum</i> | <i>num</i> |
|---------------------------|----------|------------|------------|
| r = num % 10; | | | |
| sum = sum * 10 + r; | | | |
| num = parseInt(num / 10); | | | |
| <i>2nd Iteration</i> | | | |
| r = num % 10; | | | |
| sum = sum * 10 + r; | | | |
| num = parseInt(num / 10); | | | |
| <i>3rd Iteration</i> | | | |
| r = num % 10; | | | |
| sum = sum * 10 + r; | | | |

| | | | |
|---------------------------|---|-----|---|
| num = parseInt(num / 10); | | | |
| | r | sum | n |
| <i>4th Iteration</i> | | | |
| r = num % 10; | | | |
| sum = sum * 10 + r; | | | |
| num = parseInt(num / 10); | | | |
| <i>5th Iteration</i> | | | |
| r = num % 10; | | | |
| sum = sum * 10 + r; | | | |
| num = parseInt(num / 10); | | | |