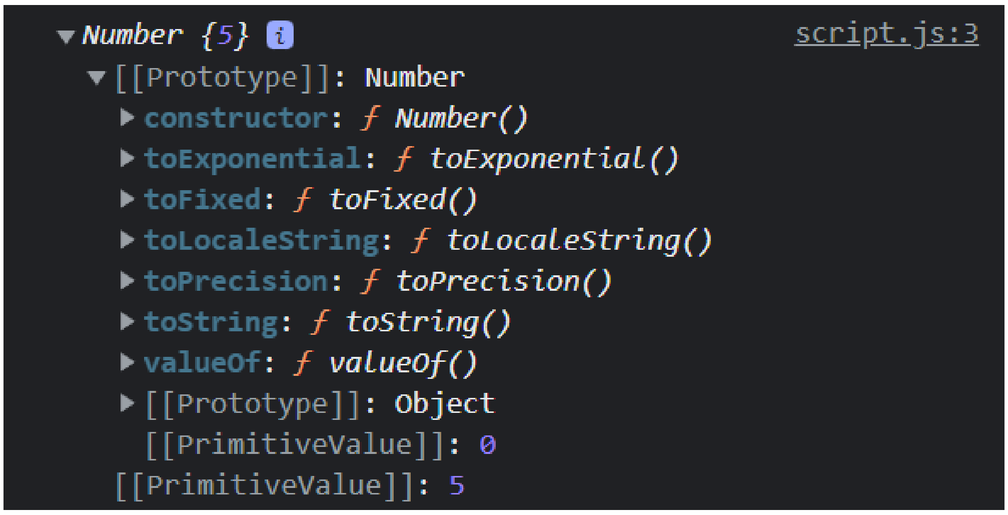
Working with Numbers

So we looked at strings and the properties and methods that are available to us. Now let's look at numbers. We'll also look at the `Math` object.

Like with strings, when we add a method to a number, a new number object is created and we can use that object to call the method. Let's create the object ourselves to see the available methods in the prototype

```
const num = new Number(5);
console.log(num)
```



```
▼Number {5} ℹ                                  script.js:3
  ▼[[Prototype]]: Number
    ▶constructor: ƒ Number()
    ▶toExponential: ƒ toExponential()
    ▶toFixed: ƒ toFixed()
    ▶toLocaleString: ƒ toLocaleString()
    ▶toPrecision: ƒ toPrecision()
    ▶toString: ƒ toString()
    ▶valueOf: ƒ valueOf()
    ▶[[Prototype]]: Object
     [[PrimitiveValue]]: 0
   [[PrimitiveValue]]: 5
```

toString()

Returns a string representation of the number

```
num.toString(); // "5"
```

`Number` types and objects do not have a `length` property. If you want to find the length, one thing that you could do is convert it to a string and then use `length`

```
num.toString().length; // 1
```

toFixed()

Returns a string representation of the number with a specified number of decimals

Let's assume num is equal to 5 right now

```
num.toFixed(2); // 5.00
num.toFixed(1); // 5.0
```

toPrecision()

returns a number with the specified length

```
const num2 = 94.4058;
num.toPrecision(3); // 94.4
```

toExponential()

Returns a string representation of the number in exponential notation

```
num.toExponential(2); // "5.00e+0"
```

toLocalString()

Returns a string representation of the number in the current locale

```
let num = 5000000;
num.toLocalString(); // "5,000,000"
```

It defaults to the browser's locale, which for me is "en-US", but let's say we want to use India's locale

```
num.toLocalString('en-IN'); // "50,00,000"
```

Number Object Properties & Values

The Number object has a few properties and methods that are available.

Max Value

Largest possible value of a number

```
Number.MAX_VALUE; // 1.7976931348623157e+308
```

Min Value

Smallest possible value of a number

```
Number.MIN_VALUE; // 5e-324
```

There are methods as well. For instance, we already looked at `isNaN()`, which will tell us if the value is actually NaN

```
Number.isNaN(NaN); // true
```