**Higher Order Functions**

**MAP Method**

var animals = [

{ name: 'Castro' , species: 'rabbit' },

{ name: 'ibra' , species: 'dog' },

{ name: 'messi' , species: 'cat' },

{ name: 'cristiano' , species: 'goat' },

{ name: 'dybala' , species: 'bunny' }

]

// // for loop

var names = []

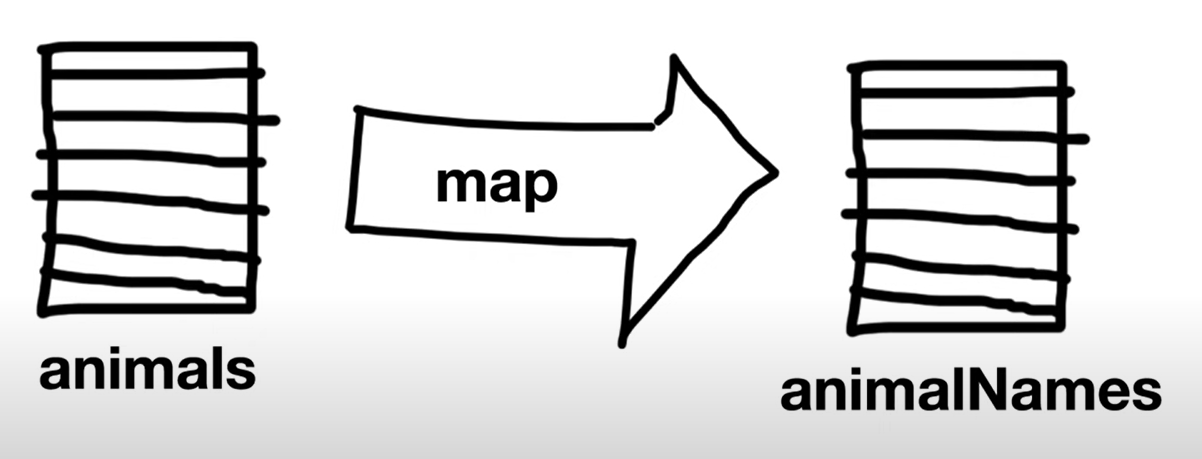
for (var i = 0; i < animals.length; i++) { names.push(animals[i].name) }

// Using map function

var names = animals.map( function (temp) { return temp.name })

// arrow functions only works on the ECHMASCRIPT6

var names = animals.map( (temp) => temp.name )



This is what map does it takes an array and displays the array but with each individual item transformed.

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Filter transforms an array into smaller array

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Does the same thing as filters but inverted

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What find does the same thing as filters but only returns the first item so that transforms an array into a single item.

**Reduce**

var orders = [

{ amount: 250 },

{ amount: 400 },

{ amount: 100 },

{ amount: 325 }

]

var totalAmount = 0

// for loop

for (let i = 0; i < orders.length; i++) {

totalAmount += orders[i].amount

}

//reduce method

var totalAmount = orders.reduce(function (sum, order) {

return sum + order.amount

}, 0)