**How to add a new item to an object at a specific position with vanilla JS**

This morning, [Kieran Barker](https://github.com/kieranbarker) asked me:

*Anyone know whether it’s possible to add an item to a specific position inside an object?*

So here’s the thing: unlike arrays, objects don’t have an index.

*Technically* the browser can order them however it wants. If you need a specific order, you’re supposed to use an array

In practical terms, the object order is almost always maintained. If you add a new item to an object, it typically gets added to the end of the object.

var lunch = {

sandwich: 'turkey',

drink: 'soda',

chips: true

};

// This gets added after "lunch.chips" in the object

lunch.dessert = 'cookie';

To add an item to a specific index in the object, we need to:

1. Create a new object.
2. Setup a variable to count the number of loops (since objects don’t have a native index).
3. Loop through the original object.
4. If the index variable equals the position you want to insert the new key/value pair into, push that to the new object.
5. Push the old key/value pairs into the new object.
6. Increase the index at the end of each loop.

I wrote [a small helper function](https://vanillajstoolkit.com/helpers/addtoobject/) to handle this.

var addToObject = function (obj, key, value, index) {

// Create a temp object and index variable

var temp = {};

var i = 0;

// Loop through the original object

for (var prop in obj) {

if (obj.hasOwnProperty(prop)) {

// If the indexes match, add the new item

if (i === index && key && value) {

temp[key] = value;

}

// Add the current item in the loop to the temp obj

temp[prop] = obj[prop];

// Increase the count

i++;

}

}

// If no index, add to the end

if (!index && key && value) {

temp[key] = value;

}

return temp;

};

Here’s how you would use it.

// Original object

var lunch = {

sandwich: 'turkey',

drink: 'soda',

chips: true

};

// Add to the end of the object

var lunchWithDessert = addToObject(lunch, 'dessert', 'cookie');

// Add between sandwich and drink

var lunchWithTopping = addToObject(lunch, 'topping', 'tomato', 1);

// Immutable copy of lunch

var lunchClone = addToObject(lunch);