

Code mutation explanation

Almost right, but let me clarify **precisely** — there's a subtle distinction.

Your code:

```
js

const users = [
  { name: "Vipul", age: 31 },
  { name: "Arun", age: 28 }
];

const newUsers = users.map(item => item.isAdult = true);
```

Step-by-step

1 `users.map(...)` creates a new array → this is `newUsers`. ✓

2 Inside `map` callback:

```
js

item.isAdult = true
```

- This **mutates the original object** inside `users`.
- It does **NOT** create a new object.
- So now each object in `users` has `isAdult: true`.

3 The **return value of the callback** is the value of the assignment, i.e., `true`.

- That's what `map` puts into `newUsers`.

✓ So after this:

```
js

console.log(users);
/* [
  { name: "Vipul", age: 31, isAdult: true },
  { name: "Arun", age: 28, isAdult: true }
] */

console.log(newUsers);
/* [true, true] */
```

Key Takeaways

- `map()` → returns a **new array**.
- Objects inside the array → still **same references**. Mutating them affects the original array.

- `item.isAdult = true` → returns `true`, that's why `newUsers` is `[true, true]`.

If you want `newUsers` to be an array of **objects with `isAdult`**, without mutating `users`, you'd do:

```
js

const newUsers = users.map(item => ({ ...item, isAdult: true }));
```

Then:

```
js

console.log(users); // original unchanged
console.log(newUsers); // new array with added key
```

I can also make a **diagram showing references and new array** — it really helps visualize why mutation happens.

Do you want me to do that?