

### ### \*\*Explanation of the Tea Selection Code\*\*

This JavaScript code filters out `"herbal tea"` from an array of tea types and stores the remaining teas in a new array called `preferredTeas`. Here's how it works step by step:

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#### ### \*\*1. Initial Setup\*\*

```
```javascript
```

```
let teaTypes = ["chai", "green tea", "herbal tea", "black tea"];
```

```
let preferredTeas = []; // Empty array to store non-herbal teas
```

```
```
```

- `teaTypes`: Original array containing four tea varieties.

- `preferredTeas`: Empty array that will store the filtered results.

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#### ### \*\*2. The `for...of` Loop

```
```javascript
```

```
for (const tea of teaTypes) {
```

```
  // Code to check each tea
```

```
}
```

```
```
```

- Loops through each item in `teaTypes` one by one.

- In each iteration, `tea` represents the current tea name (e.g., `"chai"`, `"green tea"`, etc.).

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### ### \*\*3. The `if` Condition and `continue`\*\*

```
```javascript
```

```
if (tea === "herbal tea") {  
    continue; // Skip this iteration  
}  
...
```

- When the loop encounters `"herbal tea"`, the `continue` statement \*\*skips the rest of the loop body\*\* for that iteration.

- This ensures `"herbal tea"` is \*\*not added\*\* to `preferredTeas`.

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### ### \*\*4. Adding Teas to `preferredTeas`\*\*

```
```javascript
```

```
preferredTeas.push(tea); // Add non-herbal teas to the new array  
...
```

- For teas that aren't `"herbal tea"`, they get added to `preferredTeas` using `push()`.

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### ### \*\*5. Step-by-Step Execution\*\*

Iteration	`tea` Value	Action Taken	`preferredTeas` After
-----	-----	-----	-----
1	`"chai"`	Not herbal → Added	`["chai"]`
2	`"green tea"`	Not herbal → Added	`["chai", "green tea"]`
3	`"herbal tea"`	`continue` → Skipped	No change
4	`"black tea"`	Not herbal → Added	`["chai", "green tea", "black tea"]`

---

### ### \*\*6. Final Output\*\*

```
```javascript
```

```
console.log(preferredTeas); // Output: ["chai", "green tea", "black tea"]
```

```
```
```

- **Result**: `preferredTeas`` contains all teas **except** `herbal tea``.

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### ### \*\*Key Concepts\*\*

#### 1. **`for...of`` vs. `for...in``**

- `for...of``: Iterates over **values** in arrays (used here).
- `for...in``: Iterates over **keys** in objects (not suitable for arrays).

#### 2. **`continue`` Statement**

- Skips the current iteration when a condition is met (like ignoring `herbal tea``).

#### 3. **`push()`` Method**

- Adds items to the end of an array.

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### ### \*\*Why This Code is Useful\*\*

- **Filtering arrays** without modifying the original (`teaTypes`` stays intact).
- **Simple conditional logic** (`continue`` skips unwanted items).

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### **\*\*Alternative Approach (Using `filter()`)\*\***

For a more concise solution:

```
```javascript
```

```
let preferredTeas = teaTypes.filter(tea => tea !== "herbal tea");
```

```
console.log(preferredTeas); // Same output!
```

```
```
```

---

### **\*\*Real-World Analogy\*\***

Imagine sorting a box of tea packets:

1. You pick up each packet one by one.
2. If it's herbal tea, you **\*\*ignore it\*\***.
3. Otherwise, you place it in a new box (`preferredTeas``).

Now you have a box with only your preferred teas! 📦