Currying in JS

Functional Programming technique → where → Multi argument function → transformed into → series of → single argument functions

Facilitating → Partial Applications
→ Composability

Key Points

→ Enables → Partial applications of → arguments.
→ Enhances → Composability → through → Functional Chaining
→ Utilizes → Function closures
→ Higher order Function } → for → implementation.

Original Function with multiple arguments

```
<script>
    function filterByProperty(array, property, value){
      return array.filter(item => item[property] === value);
    }
</script>
```

Curried Version

```
<script>
  function filterByProperty(property){
      return function(value){
          return function(array){
              array.filter(item => item[property] === value)
          };
      };
  }
</script>
```

Case 1)

```
const filterByGender = curriedfilterByProperty('gender');
const filterByNationality = curriedfilterByProperty('nation');
```

Case 1

```
const UKUsers = filterByNationality('UK')(users);
for(let val in UKUsers){
    coll.innerHTML += `UK users: ${UKUsers[val].name}`
}
```

O/p :-

~~UKUsers~~

Curried version with case 1

UK Users : Charlotte
UK Users : Mandy
~~UK Users : Bloomy~~

UK Users : Manjula

Working

ff } → UK → fff } } → users → fff } } ☺

Case 2

```
const femaleUsers = filterByGender('F')(users);
for(let val in UKUsers){
    co2.innerHTML += `Female user: ${femaleUsers[val].name}` + "<br/>";
}
```

Curried Version with case 2

Female User : Charlotte
female users : Mandy
Female user : Manjola