

MAPS

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→ What are maps in JavaScript?

→ Maps are a new object type that allows us to store collections of key-value pairs. Map keys can be of any type, even objects or functions. In the case of

maps, it is also easy to get the size of a map, whereas, it is not as straightforward in case of objects. Along with that, in maps, we can iterate in the order in which the values were added.

Syntax:

```
LET MYMAP = NEW MAP([ITERABLE])
```

→ parameter:

Iterable: It is any iterable object whose values are stored as key, value pair.

Providing parameters is optional. If the parameter is not specified, then a new map is created empty.

→ Returns: A new Map object.

→ Methods and Properties of Maps:

→ SIZE: It returns the number of elements or the key-value pairs in the map.

→ SET(): This method adds the key and value to the Map object.

Syntax:

```
MYMAP1.SET(x, y);
```

"x" is the key of the element to

be added to the Map and "y" is the value of the element to be added to the Map. It returns a Map object.

→ **HAS()**: This method returns a boolean value depending on whether the specified key is present or not.

Syntax:

`MYMAP.HAS(x);`

Here "x" is the key of the element to be checked. It will return true if the element with the specified key is present or else returns false.

→ **GET()**: This method returns the value of the corresponding key.

Syntax:

`MAP.GET(x);`

Here "x" is the key, whose value is to be returned. It will return the value associated with the key, if it is present in Map, otherwise returns undefined.

→ **DELETE()**: This method deletes both the key as well as a value from the map.

Syntax

```
MAP1.DELETE(K);
```

Here "K" is the key which is to be deleted from the map. It will return true if the value is found and deleted from the map; otherwise, it returns false.

→ CLEAR(): This method will remove all the elements from the Map object.

Syntax

```
MAP1.CLEAR();
```

It requires no parameters and return undefined.

Example

In this example, we initialize a map from an array that contains arrays of three values:

```
CONST STUDENTS = [  
  ['1', 'HARRY'],  
  ['2', 'JOE'],  
  ['3', 'PETER'],  
];  
  
LET MYMAP = NEW MAP(STUDENTS);  
MYMAP.GET('2'); // OUTPUT: "JOE"
```