

“What is the most frequent value in a NumPy array and how can it be found? Can you provide some examples?”

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The most frequent value in a NumPy array refers to the value that appears the most number of times in the array. This value can be found by using the NumPy function "np.bincount()" which counts the occurrences of each unique value in the array. The value with the highest count will be the most frequent value. For example, if we have an array , the most frequent value would be 4 as it appears three times in the array. Similarly, if we have an array , the most frequent value would be 3 as it appears four times in the array. This function can be useful in data analysis and statistics to identify the most common element in a dataset.

Find Most Frequent Value in NumPy Array (With Examples)

You can use the following methods to find the most frequent value in a NumPy array:

Method 1: Find Most Frequent Value

```
#find frequency of each value
```

```
values, counts = np.unique(my_array,  
return_counts=True)
```

```
#display value with highest frequency
```

```
values
```

If there are multiple values that occur most frequently in the NumPy array, this method will only return the first value.

Method 2: Find Each Most Frequent Value

#find frequency of each value

```
values, counts = np.unique(my_array,  
return_counts=True)
```

**#display all values with highest frequencies
values**

If there are multiple values that occur most frequently in the NumPy array, this method will return each of the most frequently occurring values.

The following examples show how to use each method in practice.

Example 1: Find Most Frequent Value in NumPy Array

Suppose we have the following NumPy array:

```
import numpy as np  
  
#create NumPy array  
my_array = np.array()
```

Notice that there is only one value that occurs most frequently in this array: 4.

We can use the `argmax()` function to return the value that occurs most frequently in the array:

```
#find frequency of each value
```

```
values, counts = np.unique(my_array,  
return_counts=True)
```

```
#display value with highest frequency  
values
```

```
4
```

The function correctly returns the value 4.

Example 2: Find Each Most Frequent Value in NumPy Array

Suppose we have the following NumPy array:

```
import numpy as np
```

```
#create NumPy array
```

```
my_array = np.array()
```

Notice that there are two values that occur most frequently in this array: 4 and 12.

We can use the `max()` function to return each of the values that occur most frequently in the array:

```
#find frequency of each value
```

```
values, counts = np.unique(my_array,  
return_counts=True)
```

```
#display each value with highest frequency  
values
```

```
array()
```

The function correctly returns the values 4 and 12.

Note: You can find the complete documentation for the NumPy `unique()` function .

The following tutorials explain how to perform other common tasks in NumPy: