Some Examples for improvement

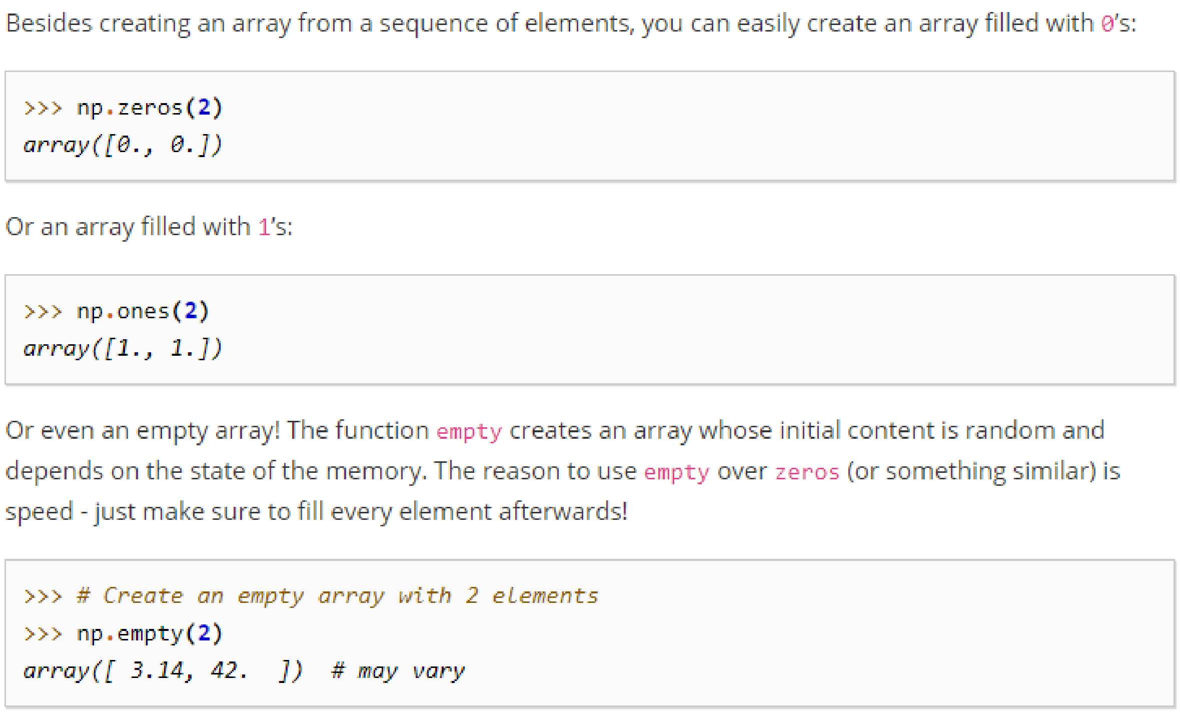
Introduction

Here , I am citing some examples of improvements and examples of data duplication which I noticed in the documents. Please note that this is a brief document of the same, A proposal containing planned improvements can be made after further discussion with the community.

Example of duplication and need of restructuring

The NumPy: the absolute basics for beginners is a really good document. I am just pointing out a few examples of improvements that can be brought to the document. Some of them are probably nitpicks , but one more step towards perfection!

In the NumPy: the absolute basics for beginners guide , "How to create a basic array" array section



Besides creating an array from a sequence of elements, you can easily create an array filled with `0`'s:

```
>>> np.zeros(2)
array([0., 0.])
```

Or an array filled with `1`'s:

```
>>> np.ones(2)
array([1., 1.])
```

Or even an empty array! The function `empty` creates an array whose initial content is random and depends on the state of the memory. The reason to use `empty` over `zeros` (or something similar) is speed - just make sure to fill every element afterwards!

```
>>> # Create an empty array with 2 elements
>>> np.empty(2)
array([ 3.14, 42.  ])  # may vary
```

Here , two functions "ones" and "*zeros*" are not explained but only examples are given.

Where all other functions used there are given a bit of explanation.
This creates a bit of ambiguity to someone who is a beginner in NumPy.

Some content in this section, for example the line

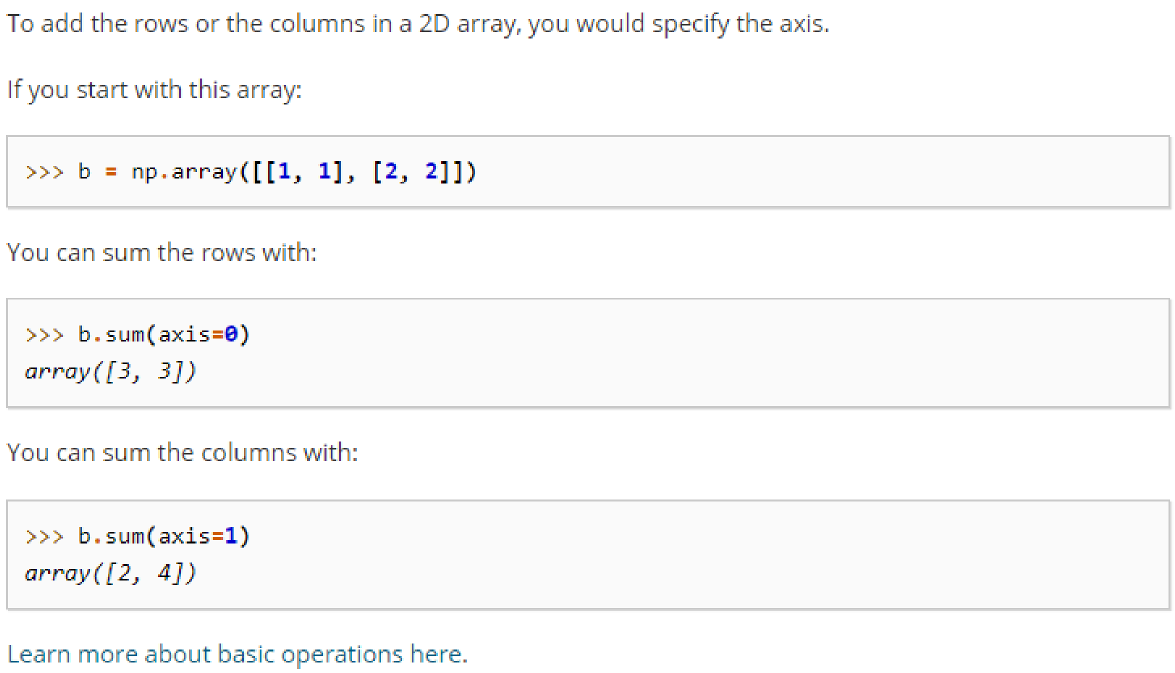
“By default, the dtype of the created array is float64, but it can be specified via the key word argument dtype”
Can be found in the NumPy quickstart array creation section and “*Key Word*” should be changed to
“*Keyword*”.

A slight rework and restructuring can remove this ambiguity from the document.

Adding more visual explanations

All the visual explanations in the beginner's guide are really good, but adding more,can always help a beginner.

For example , A visual explanation for addition of rows and columns in a 2D array could really help since all others in that section have one.



To add the rows or the columns in a 2D array, you would specify the axis.

If you start with this array:

```
>>> b = np.array([[1, 1], [2, 2]])
```

You can sum the rows with:

```
>>> b.sum(axis=0)
array([3, 3])
```

You can sum the columns with:

```
>>> b.sum(axis=1)
array([2, 4])
```

Learn more about basic operations here.