

numpy_array_management_workbook

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1 NUMPY ARRAY MANAGEMENT WORKBOOK

Have a go at the following questions to practice your new found skills.

If you have any questions, go back to the course videos and have another look. One version of the answers is available in the next download. Remember, there are different ways to write code to get the same answer, so your answer can be correct and different to the answer example!

If you feel stuck and want some in person help, then have a look at the events page to join in a workshop <https://swamphen.co.uk/events>.

```
In [1]: # import NumPy
```

```
In [2]: # create an array of floats 6 rows 5 columns
```

```
In [3]: # extract a sub array of the four numbers in the bottom right of the array
```

```
In [4]: # change the top left element to be 10
```

```
In [5]: # check that has changed in the original array
```

```
In [6]: # change the element back to the original value in the original array
```

```
In [7]: # reshape the array to 5 rows 6 columns
```

```
In [8]: # reshape this new array to another shape that will work!
```

```
In [9]: # make a copy of the first row of this reshaped array
```

```
In [10]: # change these array values to all being 12
```

```
In [11]: # make a copy of the last two rows of this reshaped array
```

```
In [12]: # stack these 3 arrays vertically
```

```
In [13]: # split the array equally horizontally and give them each variable names
```

```
In [14]: # select the last row of the bottom array created above
```

```
In [15]: # create a filter for values less than 0.5
```

```
In [16]: # apply the filter to your array
```