numpy_arrays_workbook

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1 NUMPY ARRAYS 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 [2]: # import numpy

In [1]: # create a 2 dimensional numpy array of integers 5 rows by 4 columns,
        # max number 50

In [2]: # check that the dimension of the array is 2

In [3]: # select the last element in the third row

In [4]: # select the first two elements of the last row

In [5]: # select every other row

In [6]: # select every other column

In [7]: # find where the even numbers are

In [8]: # sort the array into numerical order

In [9]: # create a 3 dimensional NumPy array of integers 4 rows by 3 columns,
        # max number 40

In [10]: # pick out the middle number of the second row

In [11]: # is this a sensible use of a 3 dimensional array?

In [12]: # create a 3 dimensional NumPy array that contains 2
         # 2dimensional arrays of 3 rows and 2 columns

In [13]: # does this need to be a 3 dimensional array?

In [14]: # select the second number from the middle row of the second 2dimensional array

In [15]: # select a slice of the last two numbers from each row

In [16]: # select alternate rows
```