

numpy_mathematical_functions_workbook

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1 NUMPY MATHEMATICAL FUNCTIONS 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]: *# set up an array of Booleans, integer, float, strings 5 long each*

In [3]: *# add your Boolean and float arrays together*

In [4]: *# why does this work?*

In [5]: *# add your Boolean, integer and float arrays together*

In [6]: *# divide your float array by your integer array*

In [7]: *# cube your integer array*

In [8]: *# what is the maximum of your integer array*

In [9]: *# calculate the standard deviation of*

In [10]: *# is this a meaningful thing to calculate?*

In [11]: *# calculate a more meaningful standard deviation*

In [12]: *# calculate the average of your integer array giving numbers of
5 and under a weight of 2 all other numbers have a weight of 1*

In [13]: *# calculate the ceiling of your float array*

In [14]: *# assume your float array is a list of angles in degrees
convert them into radians and calculate the sin of them*