



How reshape function turns a 1000 element array into a (2,4,25,5) shaped matrix:

It starts from the very last element of the shape which in this case is 5 which is the number of books. So it divides the 1000 data into 5 sets of 200 element each to put them in 5 different books. Then it divides 200 element at each book between 25 pages so we will have 8 elements at each page. Then the 8 elements at each page will be arranged in a (2,4) matrix

Difference between matlab and python

A = [1,2,3,4]

python:
A.reshape((2,2))
>> [[1,2],
[3,4]]

matlab:
reshape(A,2,2)
>> [[1,3],
[2,4]]

- The shape of a multidimensional matrix is :
(#rows in each page, #columns in each page, #pages in each book, #books in each library, #libraries in each house, etc)
- In the figure shown above the shape is (x,y,z,3,3,2)
- The yellow element is (i,j,0,1,1,1)