***A four-dimensional***

A four-dimensional (4D) array is an array of array of arrays of arrays or in other wordes 4D array is a array of 3D array. More dimensions in an array means more data be held, but also means greater difficulty in managing and understanding arrays.

**Is 4D array possible?**

Yes, Its possible. Well if you think about it everything beyond 1d arrays are abstracted in memory thinking of 2d arrays as arrays with basic elements being pointers to pointers and so on thus not only are 4d possible but beyond that too.

[**How to create 4d Array in Python**](https://intellipaat.com/community/50659/how-to-create-4d-array-in-python)

**Top of Form**

**Bottom of Form**

*import numpy as np*

*a = np.arange(72)*

*a = np.reshape(a, (4,3,2,3))*

OR

*a = np.array([[[[1,2,3],[4,5,6]],[[7,8,9],[10,11,12]],[[13,14,15],[16,17,18]]], [[[1,2,3],[4,5,6]],[[7,8,9],[10,11,12]],[[13,14,15],[16,17,18]]], [[[1,2,3],[4,5,6]],[[7,8,9],[10,11,12]],[[13,14,15],[16,17,18]]], [[[1,2,3],[4,5,6]],[[7,8,9],[10,11,12]],[[13,14,15],[16,17,18]]]])*

OR

*a = np.array([[[1,2,3],[4,5,6]],[[7,8,9],[10,11,12]],[[13,14,15],[16,17,18]]])*

*a = np.expand\_dims(a, axis=0)*

*a = np.repeat(a, 4, axis=0)*