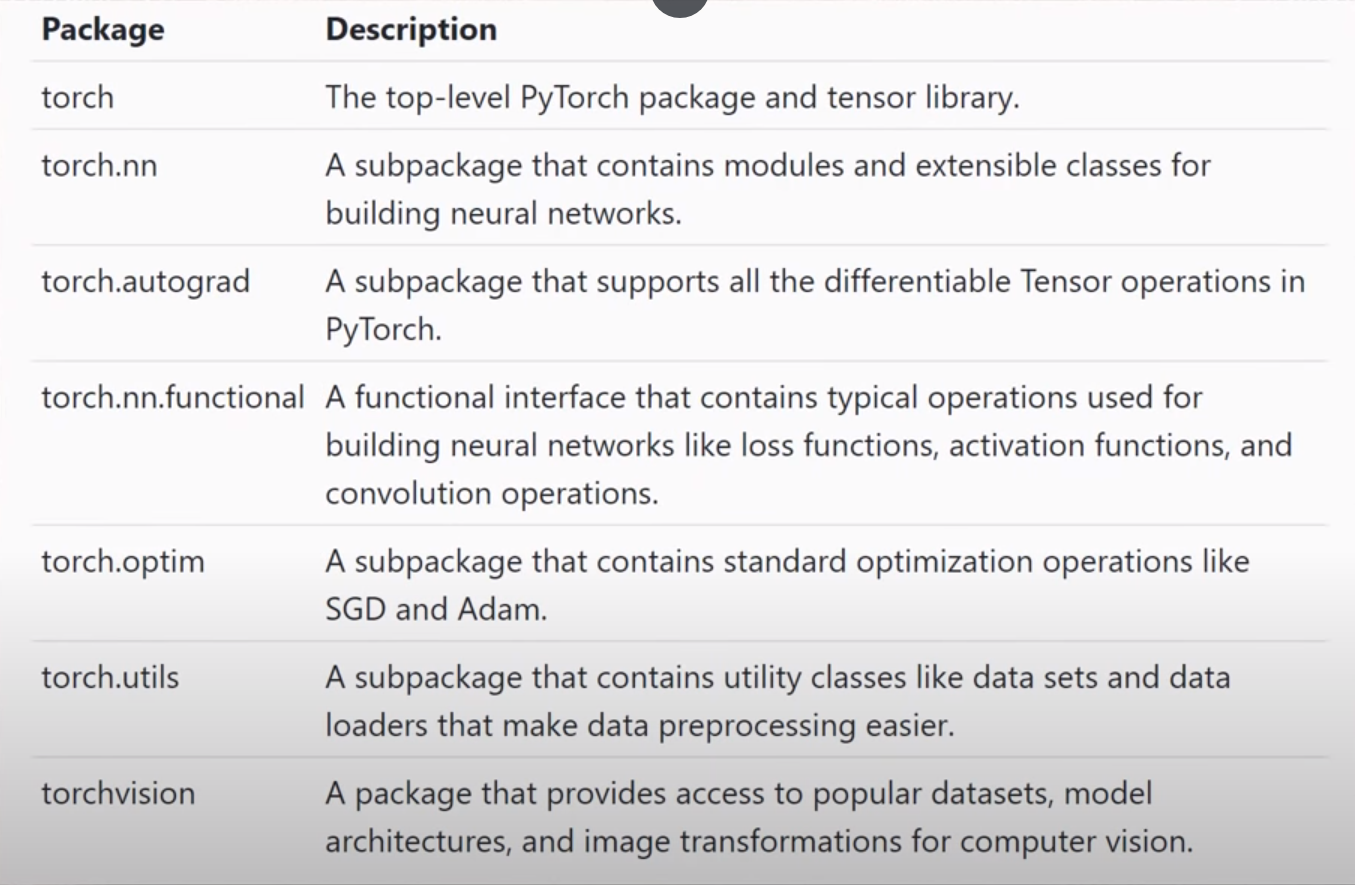
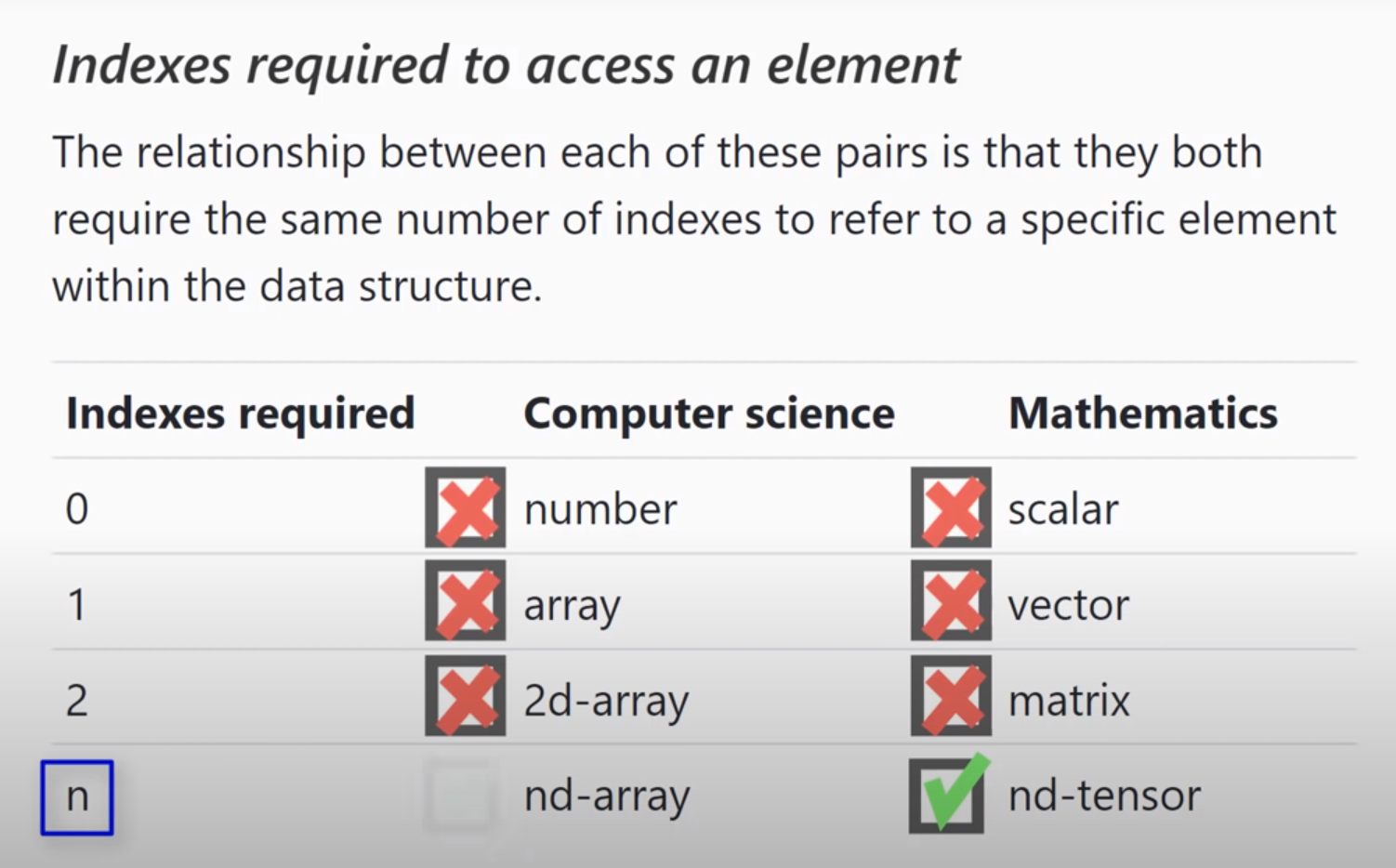
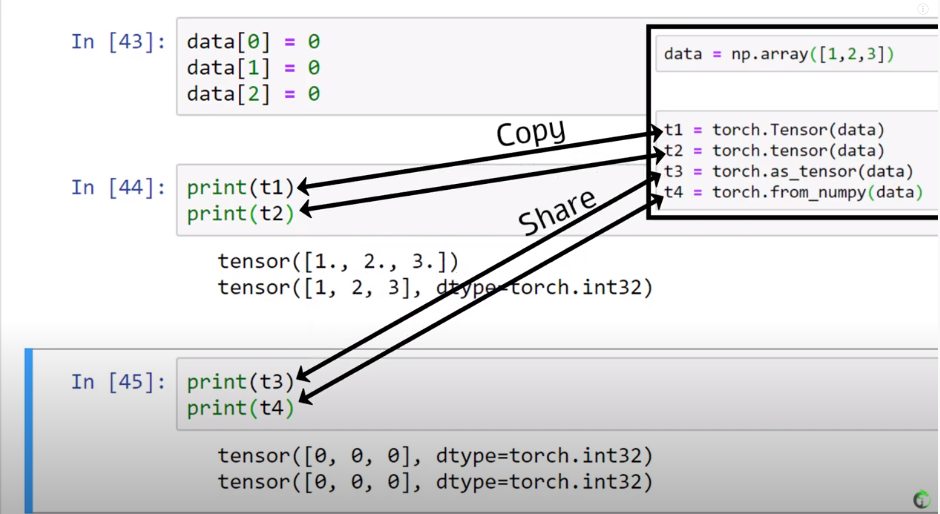
5/30/2021

**1/ Pytorch Package:**





**2/ Copy and Share Tensor:**



**Convolutional Neural Networks Explained**

**1/ Intro:**

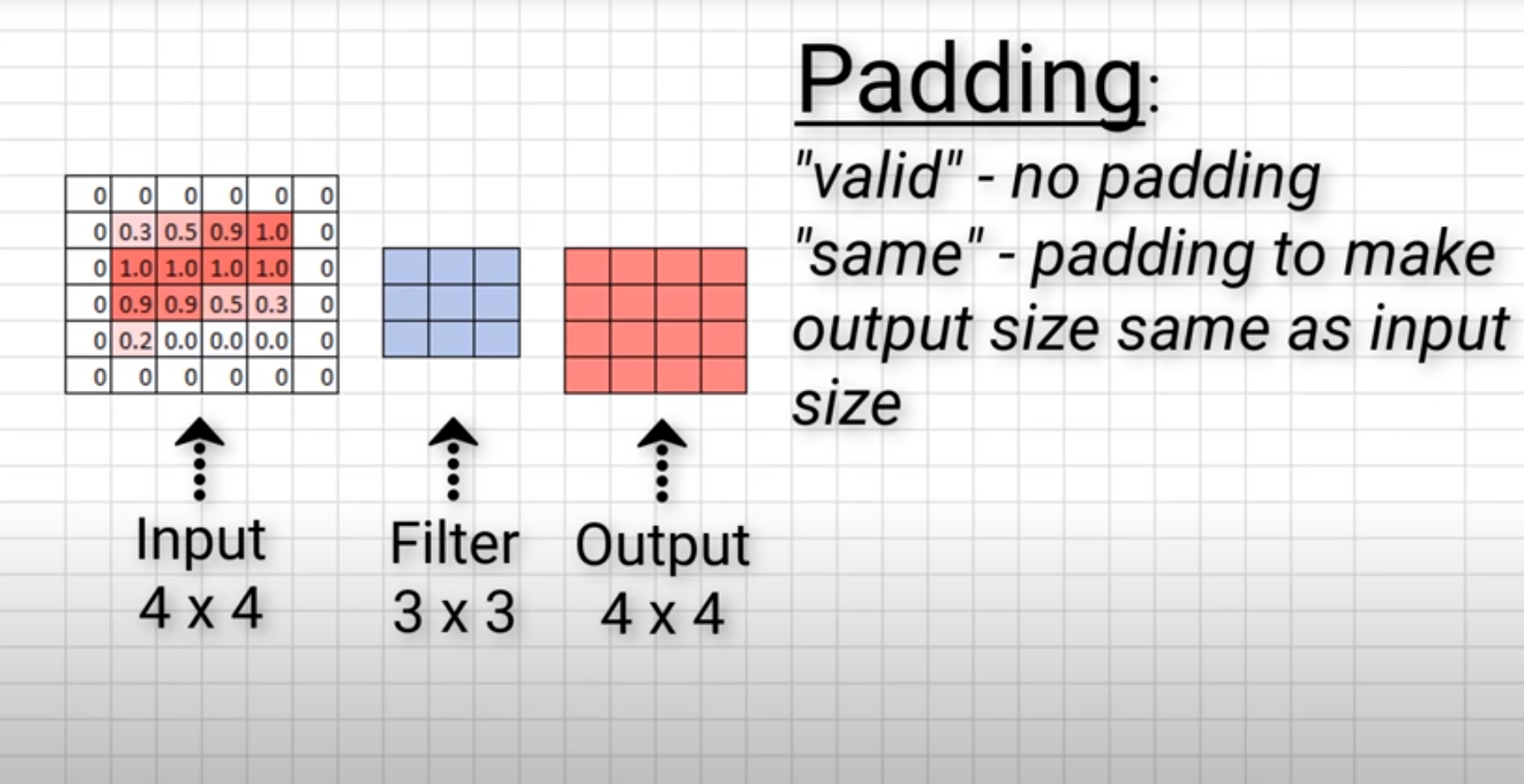
* Used for pattern finding that especially use the convolutional layers.
* Convolutional layers will enable to detect patterns (edges and images) or edge detector.
* The deeper the network the more sophisticate the networks

Alex Net: Random Horizontal + cropping are the most powerful image augmentation techniques

* When initialize the conv layer, we have to notify the filter.
* Slide = convolve

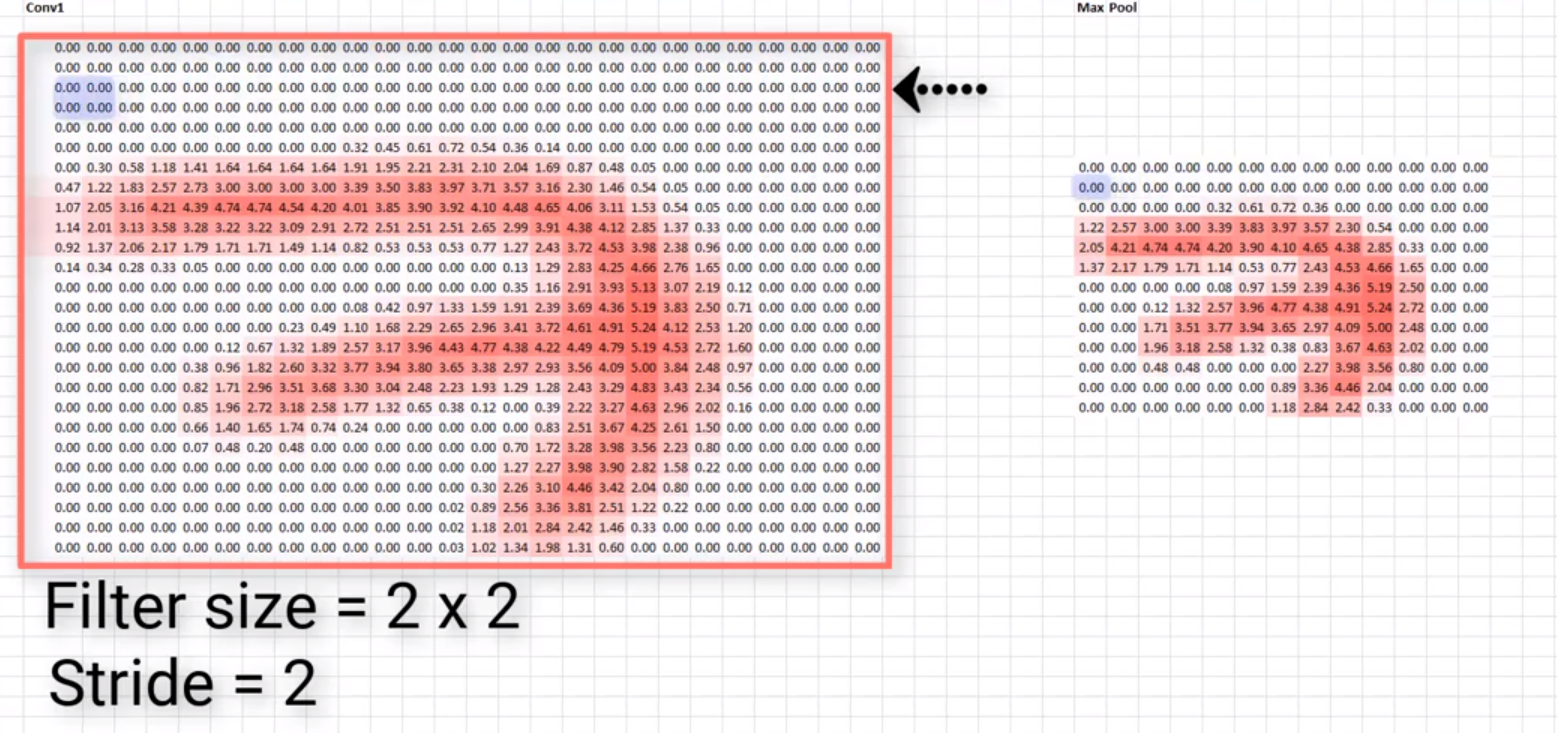
Conv Demo: https://deeplizard.com/resource/pavq7noze2

2/ Zero Paddings:



**3/ Max-Pooling Explained:**

* Stride = how many pixel we want the filter to move.
* Max Pool = Maximum of a filter pool.



**Why we use this?**

* Max pool reduce the resolution of an image output, which reduce the amount of parameters of the networks and reduce computational load which might reduce overfitting.
* Max pool picks out the most activated pixel and preserve them in future layers.

**4/ Back Propagation:**