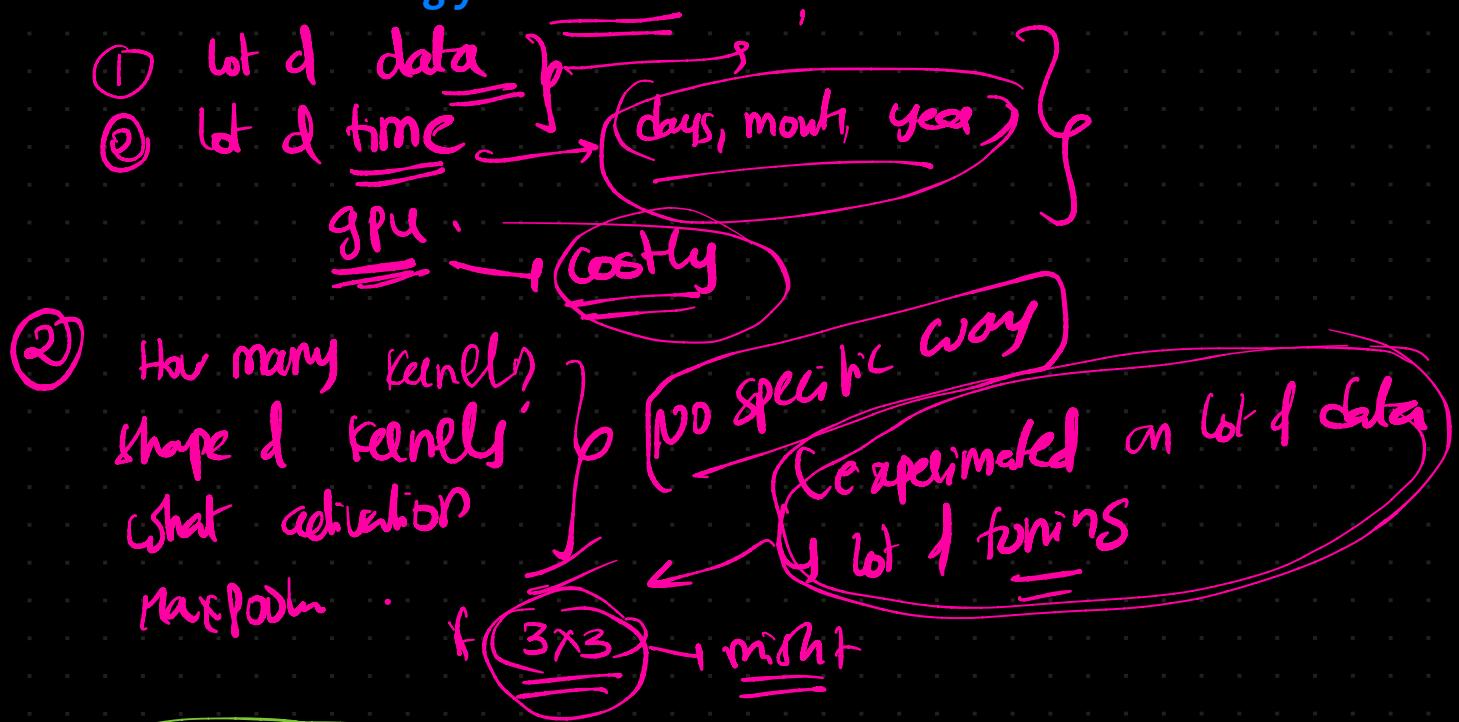
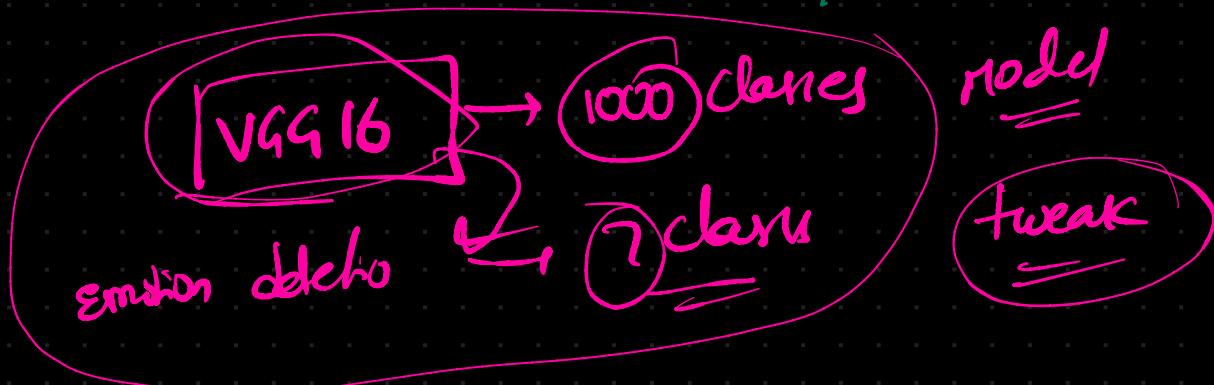


1. Problems of training your own model?

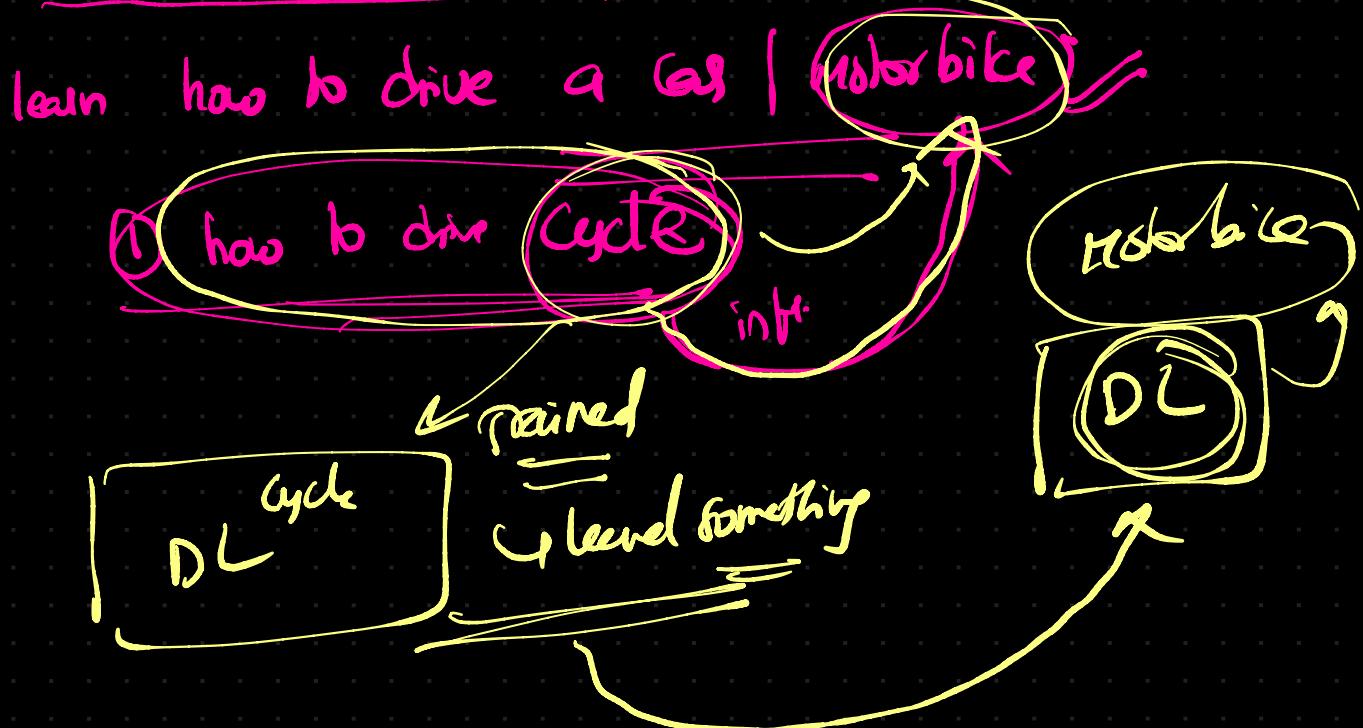


① Imagenet dataset



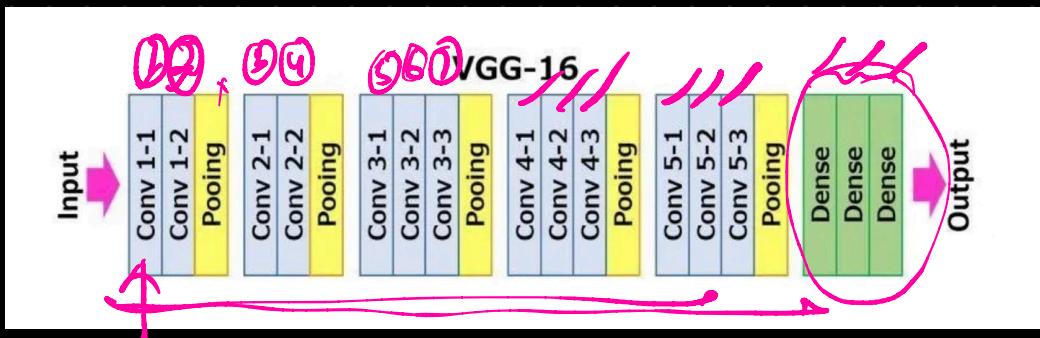
What is transfer Learning?

Is a technique that focusses on storing knowledge gained while solving one problem and applying to a different problem.



VGG16 Architectures.

VGG16 is object detection and classification algorithm which is able to classify 1000 images of 1000 different categories with 92.7% accuracy. It is one of the popular algorithms for image classification and is easy to use with transfer learning.

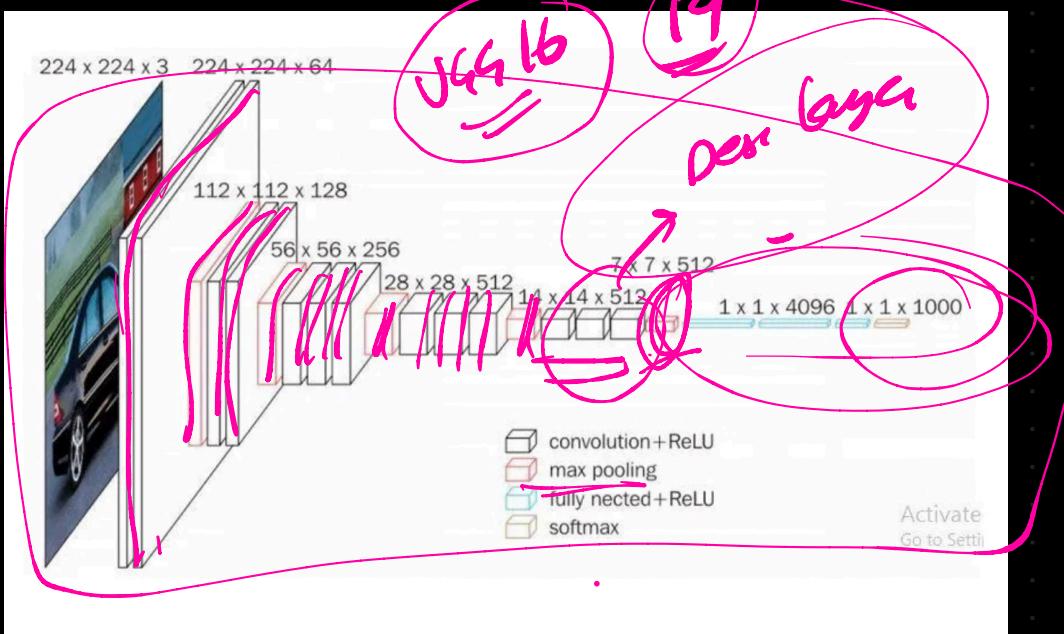


16 Trainable Layers
Conv Layes - Capture Spatial Info
FC Layer - Classification Task

Convolution layers of 3x3 filter with stride 1 and always used the same padding
Maxpool layer of 2x2 filter of stride 2.

Conv-1 Layer has 64 number of filters
Conv-2 has 128 filters
Conv-3 has 256 filters
Conv 4 and Conv 5 has 512 filters

Three Fully-Connected (FC) layers follow a stack of convolutional layers: the first two have 4096 channels each, the third performs 1000-way ILSVRC classification and thus contains 1000 channels (one for each class). The final layer is the soft-max layer.



Transfer Learning in Action:

1. Freeze all Layers except dense.
2. Fine tune layers with dense.

