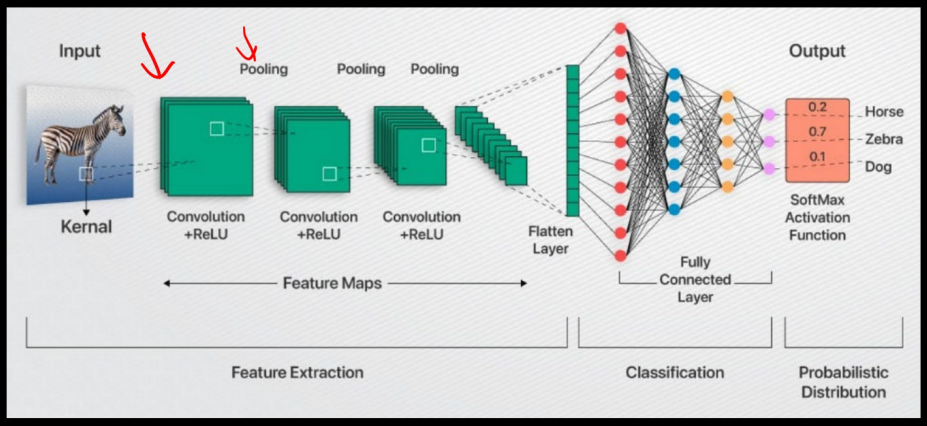
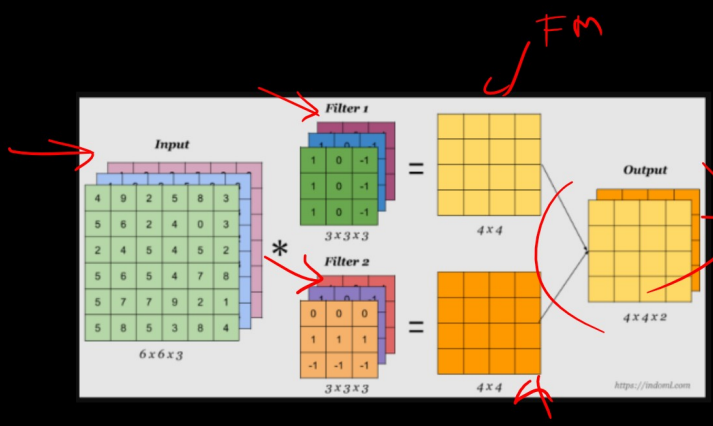
Agenda:

① pooling Layer in CNN





Conv → pooling

The problem with convolution

① memory issue

② Translation variance

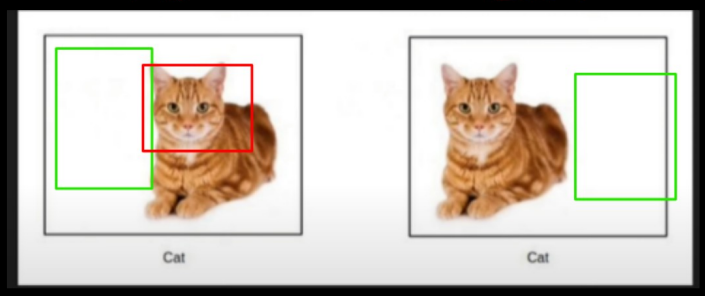
228 x 228 x 3

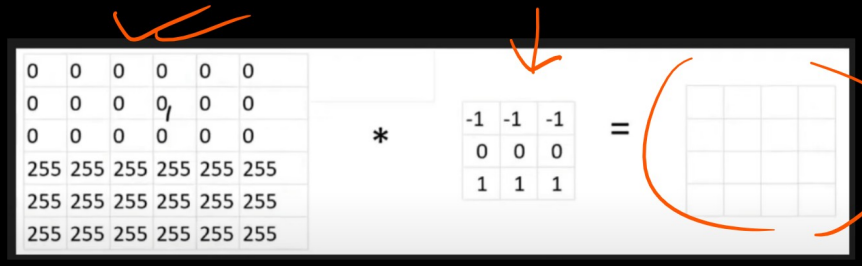
(3 x 3)

(100 - filters) = 1000

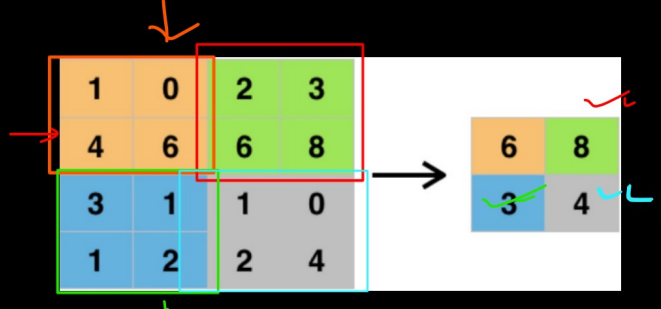
⇒ (226 x 226 x 3) x 100 x 32 ⇒ 19 mB

100 ⇒ 1.5 GB





→ Relu → pool layer



size = (2, 2)

stride = 2

type =

Pooling Types:

→ ~~max~~ pooling

→ Avg pooling

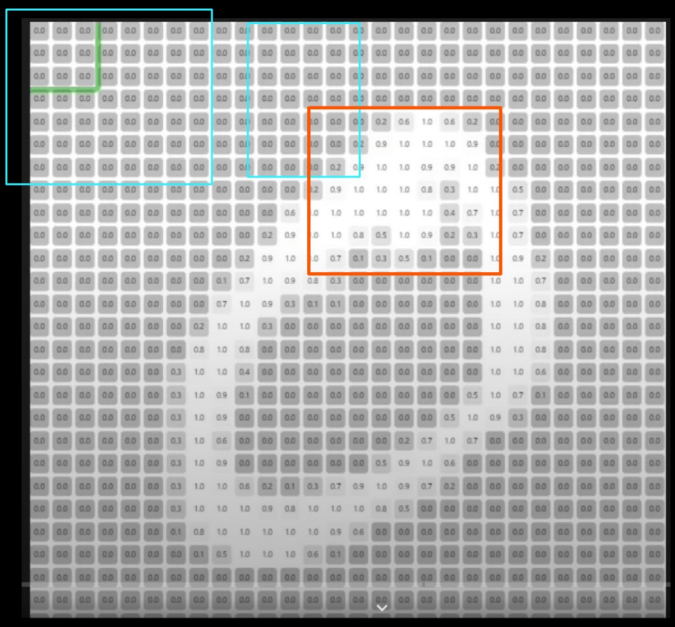
→ Global pooling

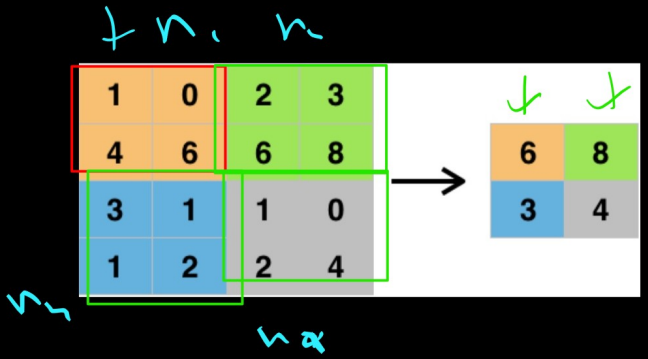
→ Global max pool

→ Global avg pooling

→ Pooling gets the Dominant feature

→ Pooling Does downsampling → (Half





Pooling Types:

~~Max pooling~~

Avg pooling

Global pooling

Global max pool

Global avg pool

(end of channel →