

Inception v2

$d$

$3$

$H$

$3$

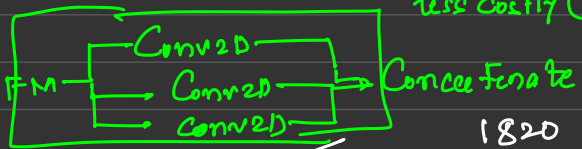
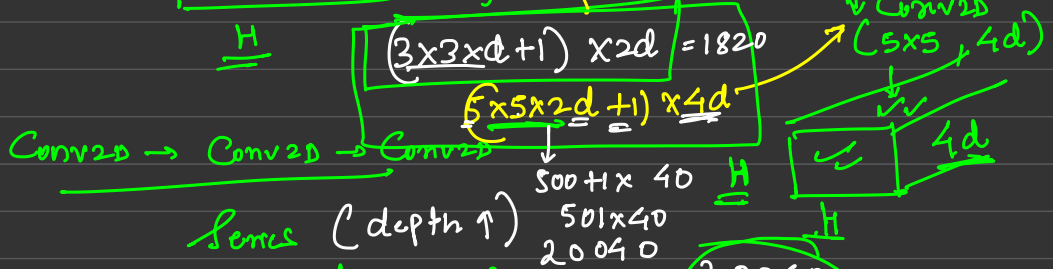
$3 \times 3 \times 3$

$\rightarrow$  Conv2D

$H$

$H$

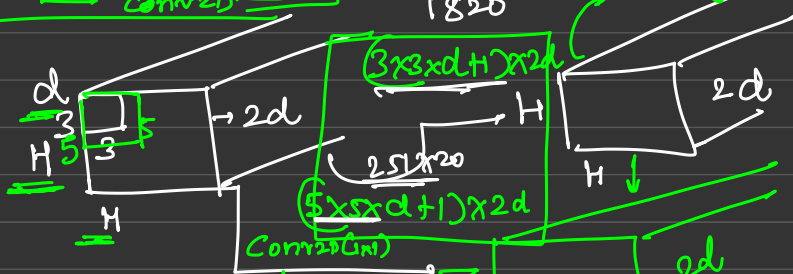
$(3 \times 3 \times d + 1) \times$



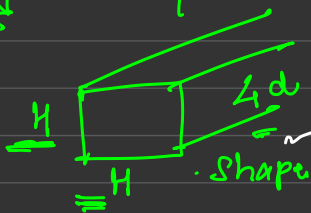
less costly (Parameter)

$$\begin{array}{r} 20040 \\ + 1820 \\ \hline 21860 \end{array}$$

map generated from  $3 \times 3$

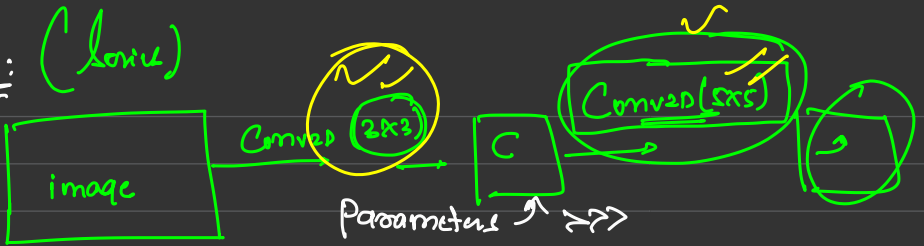


map generated  
5x5

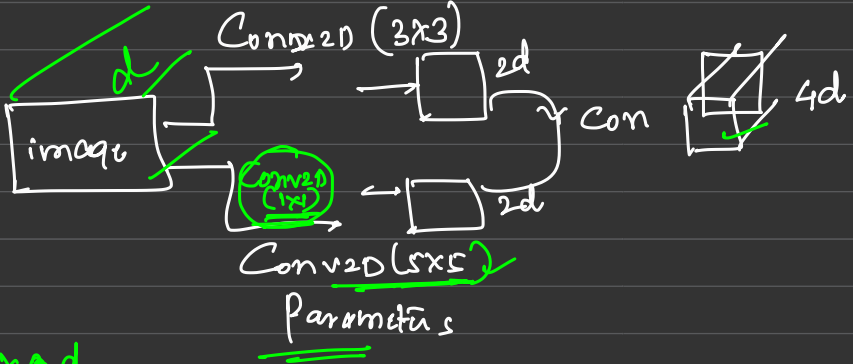


$$\begin{array}{r} 5020 \\ 1820 \\ \hline 6840 \rightarrow \checkmark \\ \hline 110 \end{array}$$

Case 1: (Serial)

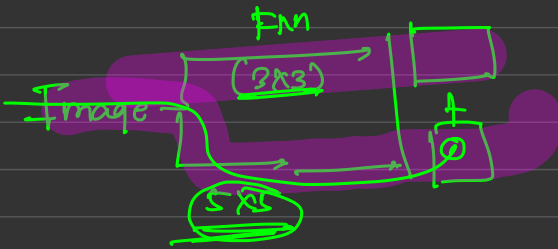
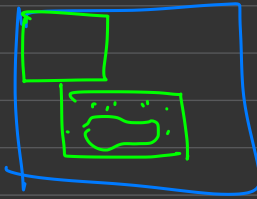
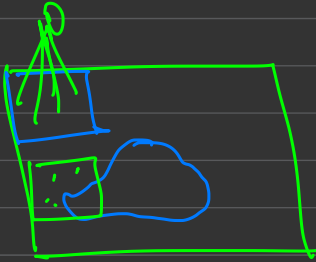


Case 2: (Parallel)

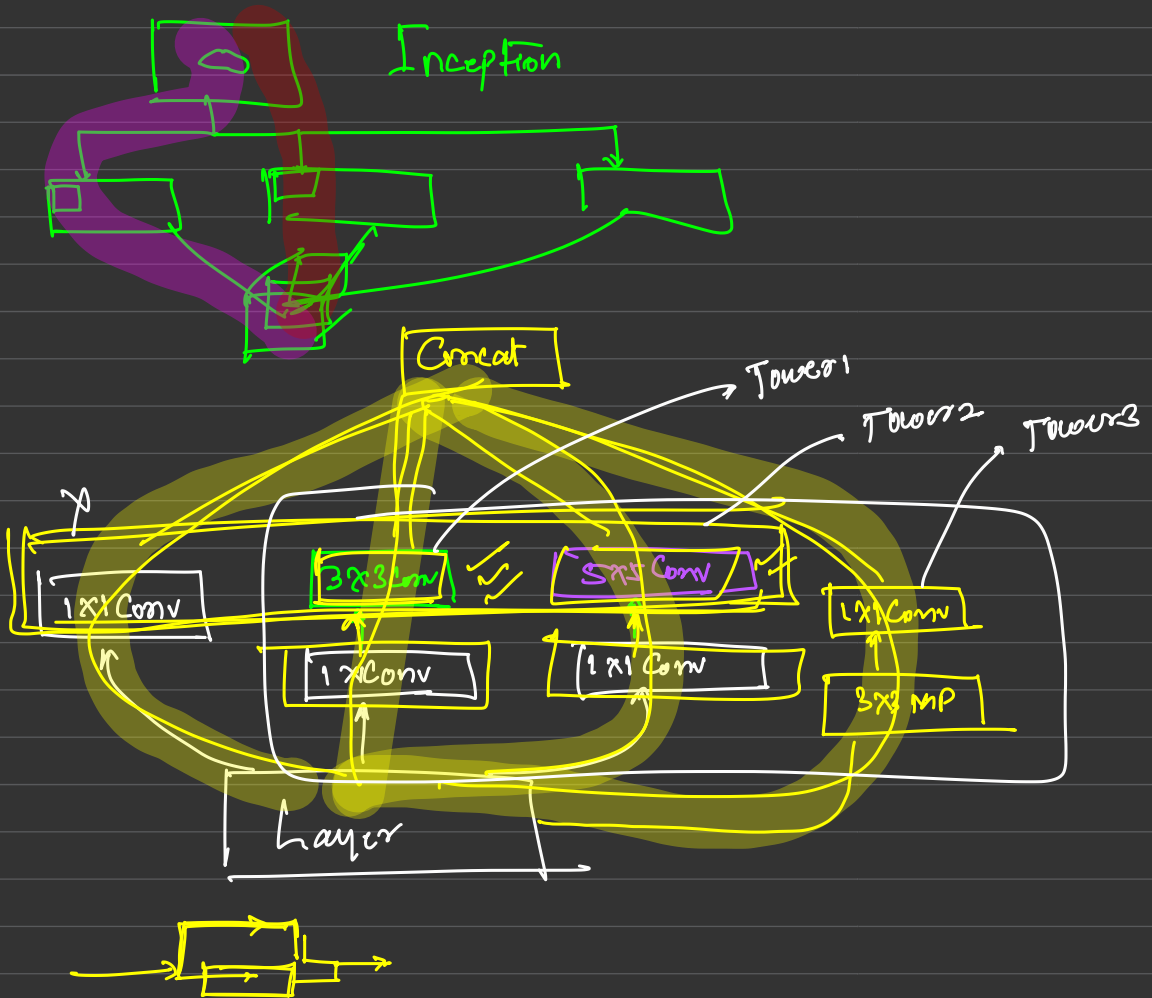
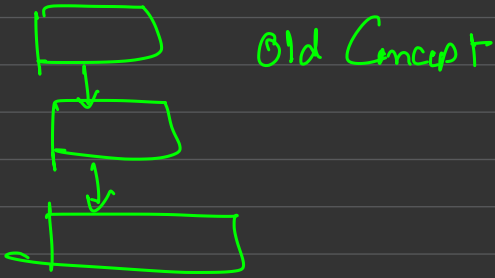


$$(1 \times 1 \times d) \times d$$

$$\underline{d \times d \times 110}$$



Parallel manner  $\rightarrow$  parameters and doing a better learning



C

Expanded from the settings