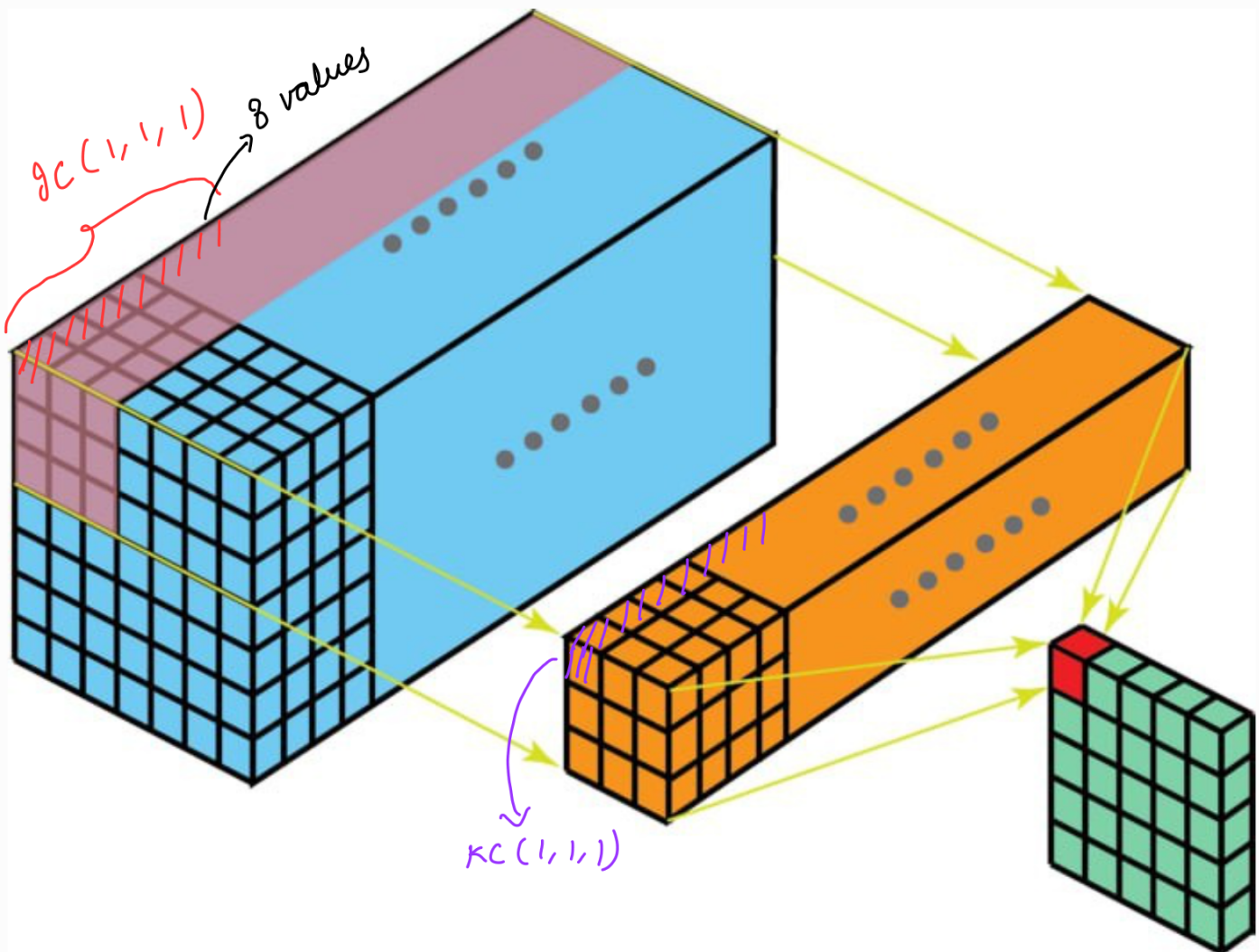


# Approach for Convolution

Notations :-

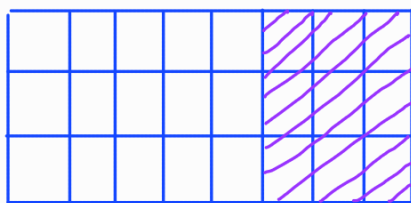
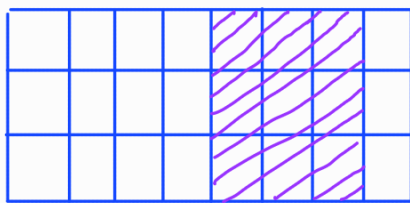
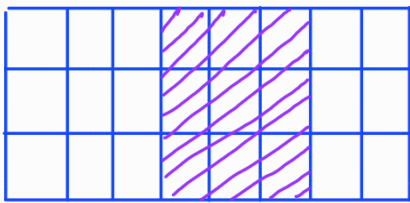
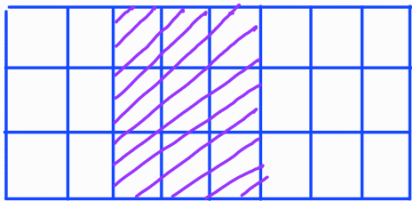
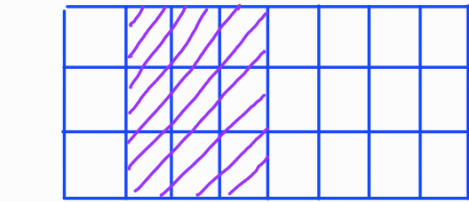
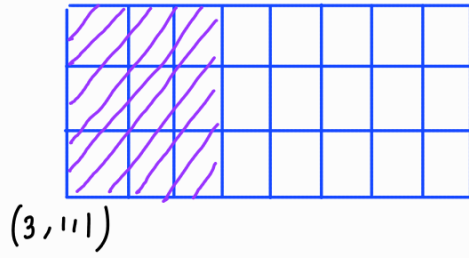
$\rightarrow gC(i, j, ch) \Rightarrow$  A input cylinder of 8 values across channel  
 $= [gC(i, j, ch), gC(i, j, ch+1), gC(i, j, ch+2) \dots]$   
8 values

$\rightarrow KC(i, j, ch) \Rightarrow$  A kernel cylinder of 8 values across channel  
 $= [KC(i, j, ch), KC(i, j, ch+1), KC(i, j, ch+2) \dots]$   
8 values



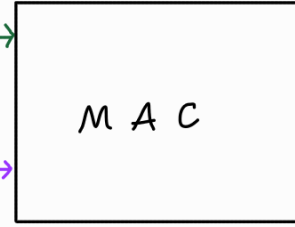
i)

$(1, 1, 1)$   $gC$   $(1, 8, 1)$

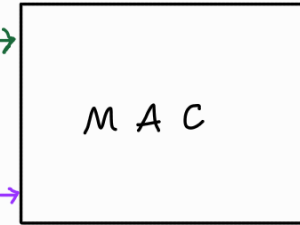


$KC$

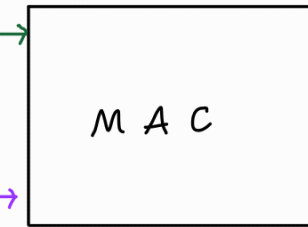
1,1,1	1,2,1	1,3,1
2,1,1	2,2,1	2,3,1
3,1,1	3,2,1	3,3,1



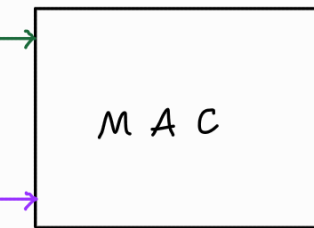
Conv 1



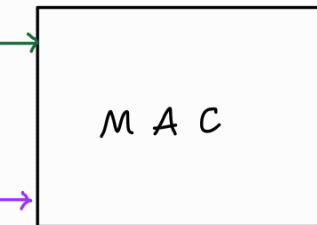
Conv 2



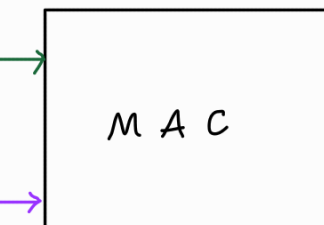
Conv 3



Conv 4



Conv 5



Conv 6

