

## Question 1

Given,

initial input size =  $1 \times 256 \times 256$

total filters,  $K = 6$

filter size =  $8 \times 8$   $\therefore F = 8$

stride,  $S = 2$

padding,  $P = 0$

max pool size =  $2 \times 2$

Now,

$1 \times 256 \times 256$



6 filters of size  $8 \times 8$

$6 \times 125 \times 125$



max pooling

$6 \times 62 \times 62$



$6 \times 6 \times 28 \times 28$



max pooling

$6 \times 6 \times 14 \times 14$



$6 \times 6 \times 6 \times 4 \times 4$



max pooling

$6 \times 6 \times 6 \times 2 \times 2$

└──────────> flattening = 24