CV ASSIGNMENT 1

Q1) feature is output that we get after applying a filter on an image which gives an understanding of image.

Q3) each matrix element is multiplied by corresponding pixel number.

Q4) the kernel filters the image i.e, 3x3 zero matrix and finds that there are no features to be learnt or image is empty.

Q5) padding is adding non important pixels at the edges of the output image to have necessary image size.

Q6) striding gives how many pixels to be jumped to continue convolution on next set of pixels.

Q7) input: (N,C,H,W) or (C,H,W).

weights: (out\_channels,in\_channels/groups,kernel\_size[0],kernel\_size[1])

Q8) channel is simply the fundamental colour class of image. For example, red, green, blue, greyscale are all channels which give us depth of convolution.

Q9) convolution is multiplication of every element of matrix with corresponding element of image pixel matrix unlike regular matrix multiplication.