

Assignment 2

1. The sharpness of the image increases as the value of k increase which can be seen below:

For $k = 1$



For $K=5$



3. c) Reconstructed image is same as the original image.

Integral applications:

- improves the computation time can be used when processing time matters a lot.
- fast calculation of the haar like features(2 rectangle feature, 3 rectangle features etc)
- speeding up the process in SURF algorithm
- for Block Matching

d) The number of addition operation in the solution is $2 \cdot M \cdot N$ where $M \cdot N$ is the size of the image.