CS663: Assignment 4 - Q2

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Q. Reconstruction of any one face image from the training dataset and visualization of first 25 eigenfaces.

Results

Reconstruction of an image for various value of principal components. k = [2 10 20 50 75 100 125 150 175]
The 1st image corresponds to the `k = 1` and lastimage coresponds to `k = 170` and the inbetween images are arranged accordingly.
We can also see from the results that how PCA can be implemented for denoising of an image.

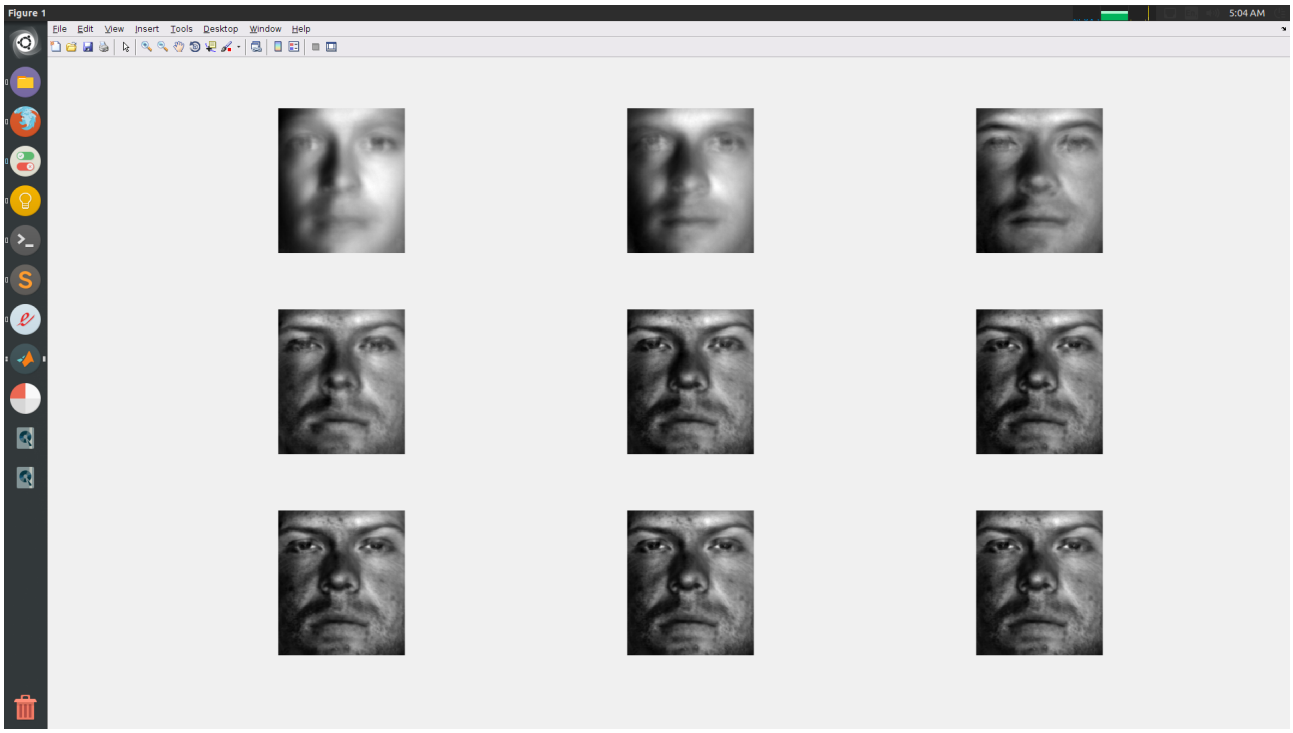

Figure 1: Reconstructed image for various value of principal components)

Top 25 eigenfaces

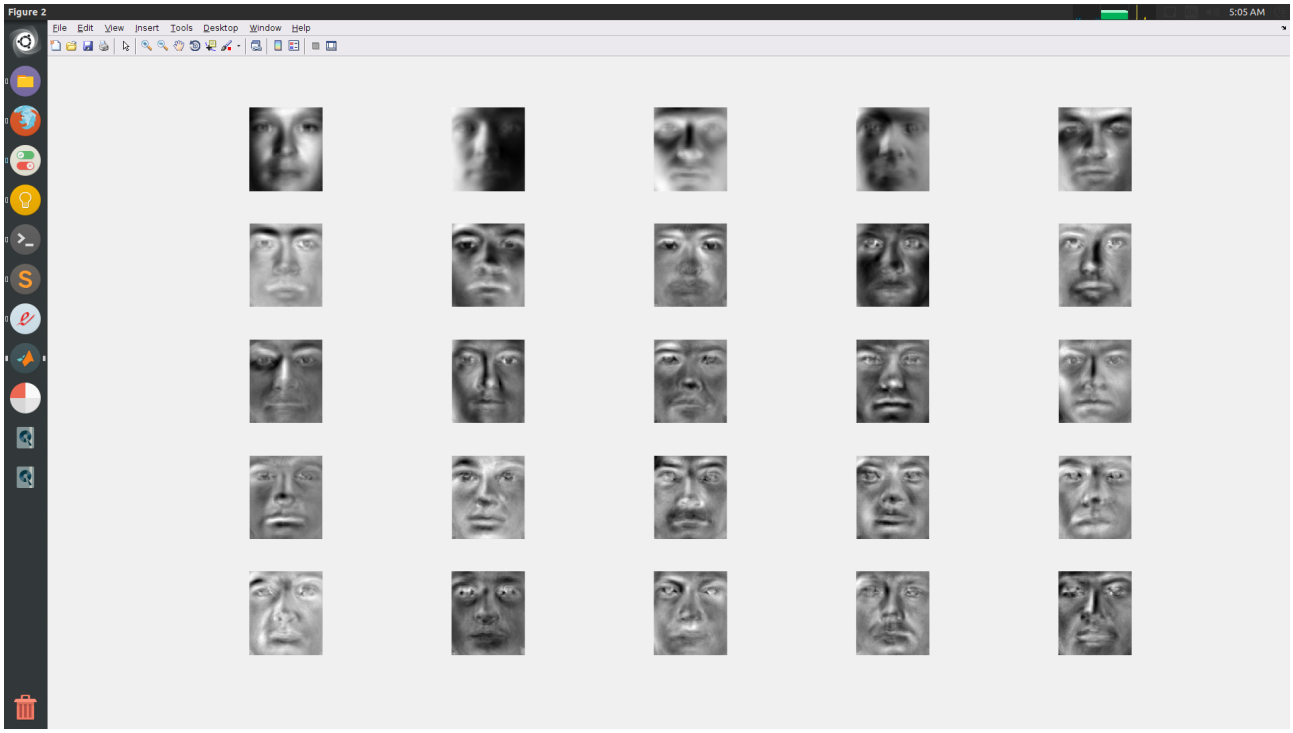

Figure 2: first 25 eigenfaces

Note: All the datasets directories were in the main folder of the assignement alongside the folders of individual questions.