Assignment-2
Face recognition using PCA-LDA on dataset olivetti_faces

Input to model:

Olivetti Dataset

Brief information about Olivetti Dataset:

- Face images taken between April 1992 and April 1994.
- There are ten different image of each of 40 distinct people
- There are 400 face images in the dataset.
- Face images were taken at different times, variying ligthing, facial express and facial detail.
- All face images have black background.
- The images are gray level
- Size of each image is 64x64.
- Image pixel values were scaled to [0, 1] interval.
- Names of 40 people were encoded to an integer from 0 to 39.

Principle Component Analysis

Principle Component Analysis (PCA) is a method that allows data to be represented in a lesser size. According to this method, the data is transformed to new components and the size of the data is reduced by selecting the most important components.

Procedure used:

The same procedure is used as explained by Dr G.C. Nandi Sir in his lecture on PCA-LDA

Ouput:

Output to shown in the form of accuracy of correctness of the model which is aroudn 62.5 %