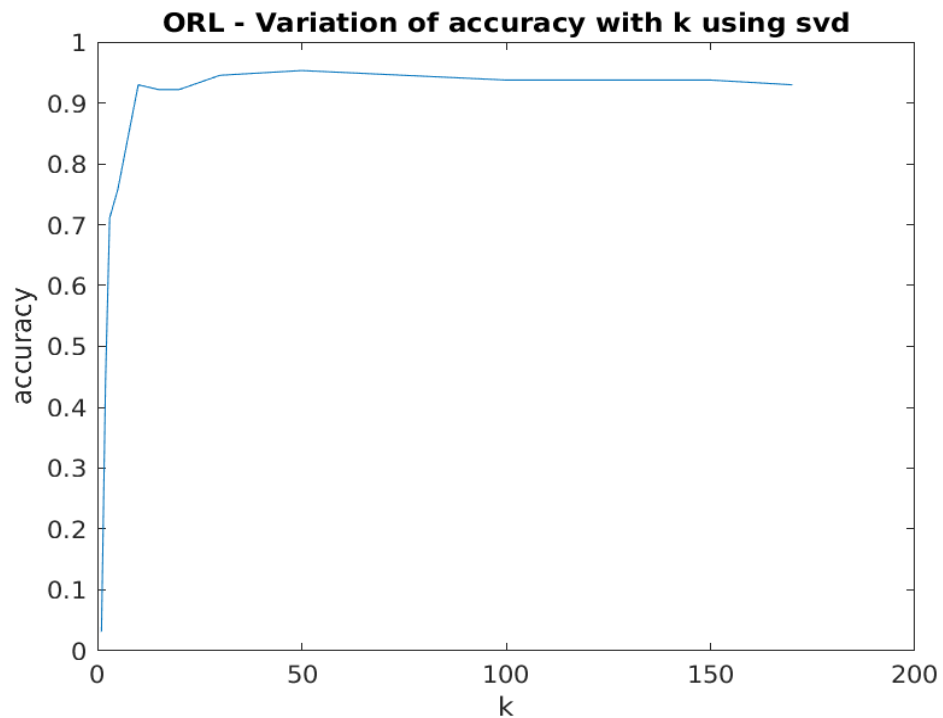


## Q4 Report

### Instructions to run code:

Put the 2 datasets ORL and CroppedYale inside a folder named “data” and run myMainScript.m

### 1. ORL Dataset

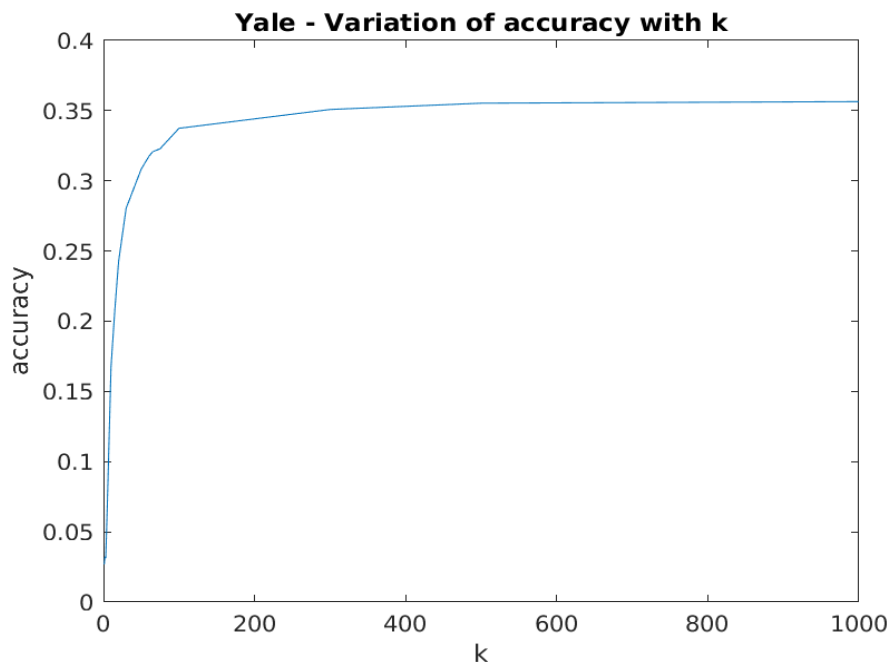


Max accuracy – 95.31% at k=50  
using svd

The results are confirmed by using eig for the L matrix , which gives the same accuracies and plot.

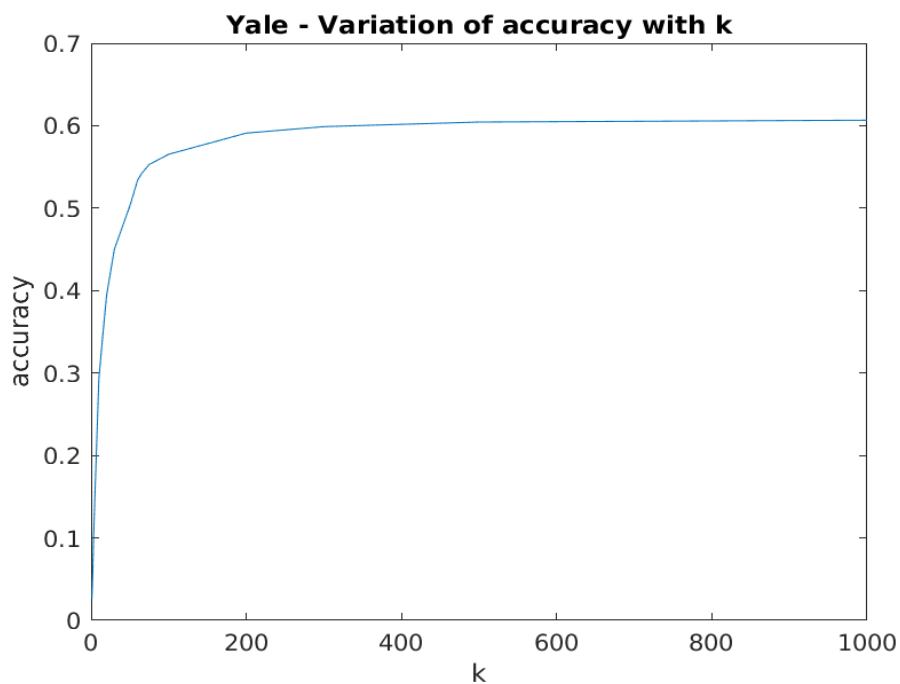
## 2. Yale dataset

- a) Taking the squared difference between all the eigencoefficients



Maximum accuracy achieved is 35.64% at k=1000

- b) Taking the squared difference between all except the three eigencoefficients corresponding to the eigenvectors with the three largest eigenvalues



Maximum accuracy achieved is 60.67% at k=1000