Coursework Four Results: Jamal Khan - jzk09

The mean vector for Hepatitis C data set:
 1.164 3.916 0.448 5.679 4.865 3.778 4.127 3.604 0.217
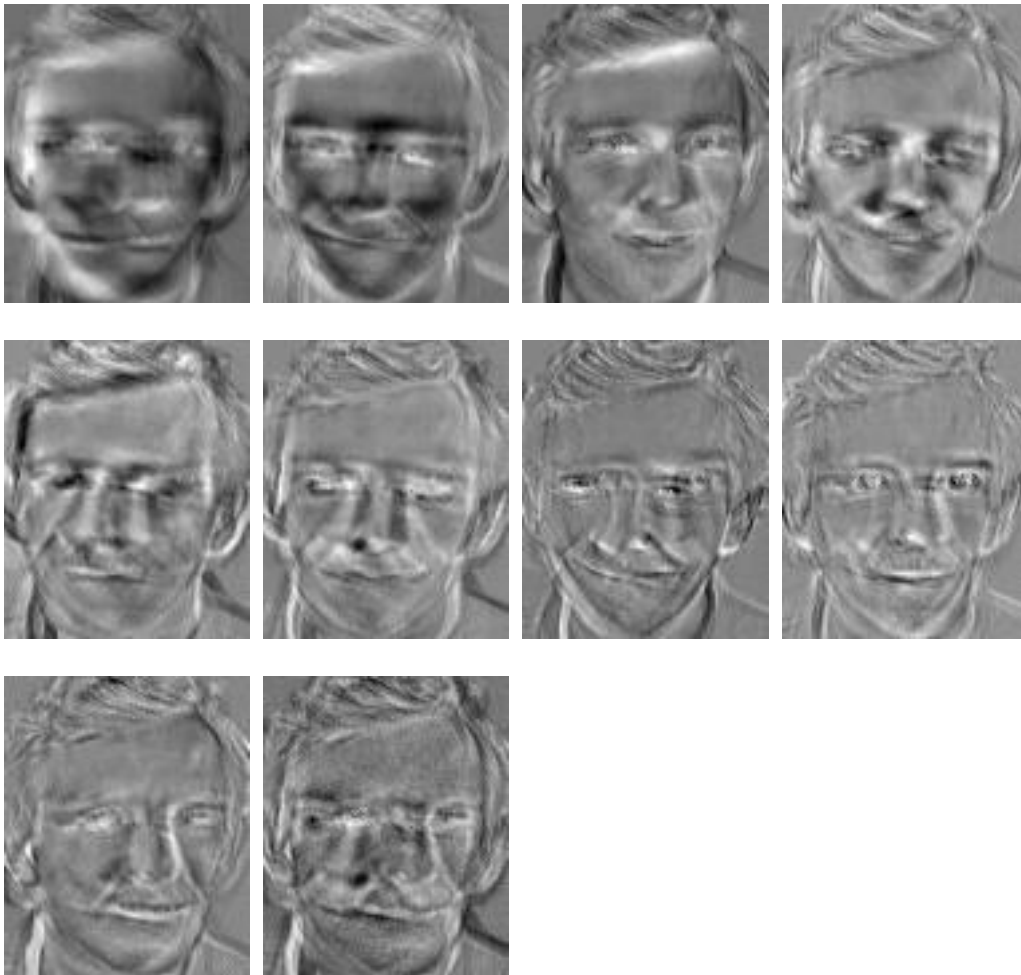
The covariance matrix for Hepatitis C data set:
```
 5.880  0.245 -0.004 -0.284 -0.346 -0.417 -0.481 -0.267 -0.067
 0.245  7.572  0.073 -0.358 -0.346  0.257  2.273  0.946 -0.032
-0.004  0.073  0.247 -0.116 -0.039 -0.003  0.100  0.066 -0.005
-0.284 -0.358 -0.116 16.960  7.969  4.443 -1.036 -0.306  0.047
-0.346 -0.346 -0.039  7.969  8.361  4.921 -0.763 -0.752 -0.001
-0.417  0.257 -0.003  4.443  4.921  6.683 -0.087 -0.376 -0.141
-0.481  2.273  0.100 -1.036 -0.763 -0.087 20.583  1.122  0.014
-0.267  0.946  0.066 -0.306 -0.752 -0.376  1.122  4.317  0.119
-0.067 -0.032 -0.005  0.047 -0.001 -0.141  0.014  0.119  0.170
```
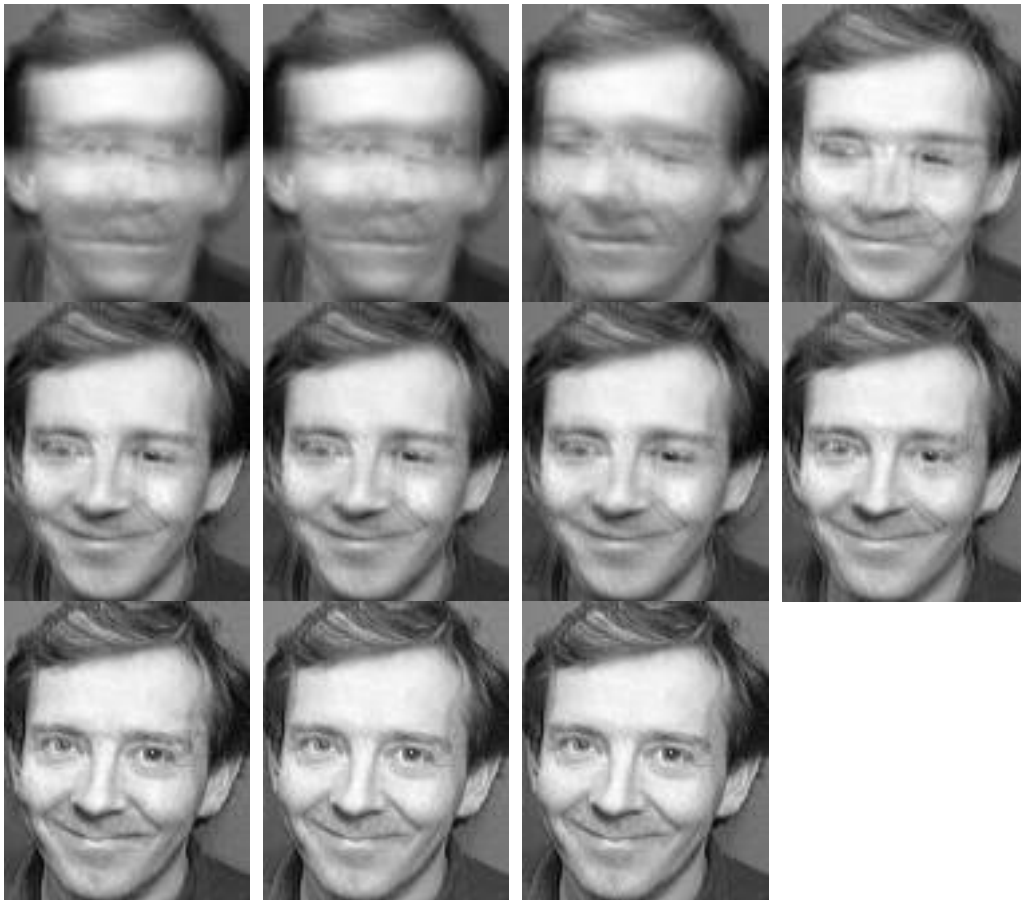
The component magnitudes for image 'c.pgm' :
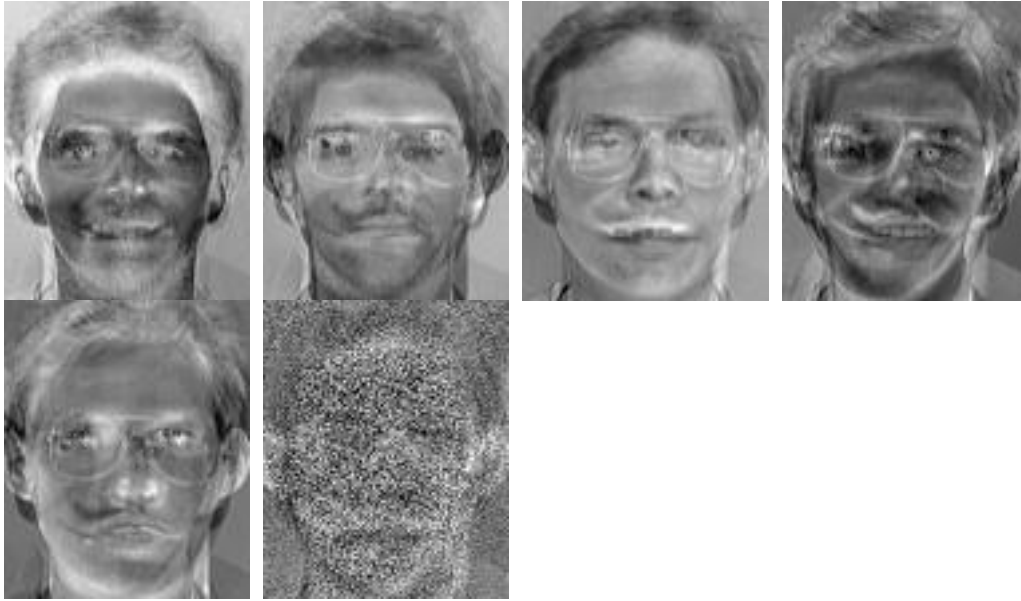1110.709 1537.080 410.837 -1887.013 941.699 -892.087

Eigenface images for task 4.3 are below :

Partial reconstructions for task 4.4 of 'c.pgm 'are below :

Eigenface images for new basis are below:

Partial reconstructions for 'c.pgm', using new basis: