

Assignment 4 Report

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3.4

- b. Yes. The original data is not separable very clearly and the covariance is not clear. After projecting on two PCs, the data are separable better and the covariance is clearer.
- c. It looks better because the PLS emphasizes more on the difference between classes.

3.5

- a. two, since the first two eigenvalues look significant.
- b. The first two components look uniform.

You can see the plots: 3.5.b.*.jpg

The decimal point is at the |

```
-1 | 0
-0 |
-0 | 000000000
0 | 0000
```

The decimal point is at the |

```
-1 | 0
-0 |
-0 | 000000000
0 | 00000
```

The decimal point is at the |

```
-0 | 9
-0 | 3111000
0 | 000011
```

3.7.1 The two clusters (bar-like) combine together.

3.7.b looks better.