

Part II.

The two eigenvectors are:

```
u1 = [ 9.99105099e-01  1.51964502e-02  9.79220626e-04  3.21871599e-03
       2.72345362e-03 -2.61580986e-03  1.80060053e-03  9.66570422e-04
       9.62773783e-04  5.26607587e-04  4.80647649e-04  3.54839554e-04
       7.48133475e-03 -2.87908902e-02  7.04873626e-04 -2.99052340e-03
       8.93430013e-04 -5.09538148e-03  3.54461308e-04 -2.27319517e-03
       5.56200613e-03 -2.46519855e-03 -2.35761110e-02  2.07670827e-03
       -1.25283520e-04  7.34311442e-04 -1.63076345e-03]
```

```
u2 = [ 0.03580635  0.0414222 -0.02793342  0.0330171 -0.03727893  0.
05281056
       -0.03574589  0.05052722 -0.04071391  0.05276296 -0.03235492  0.07589703
       -0.12014462  0.90309408 -0.04526068  0.0571933 -0.03635936  0.07860035
       -0.04165552  0.04976368 -0.10102199 -0.01750985  0.34020796  0.00525308
       0.04205823 -0.02721032  0.00618435]
```

The projected data points are:

```
[[-38.3934171  35.34700309]
 [-38.40129011 35.06389881]
 [-48.38569989 33.79221355]
 ...
 [174.53005232 -53.11792166]
 [324.41603571 -47.57419798]
 [334.34081837 -46.71549429]]
```

Process finished with exit code 0