```
 1 C:\Users\nguye\.virtualenvs\lab4_clustering\Scripts\
   python.exe "C:/Users/nguye/OneDrive/Documents/
   HpSepctrex360/GeneralClassDownloads/CSC 466/
   lab4_clustering/clustering/hclustering.py" ./data/
   4clusters.csv 0.2976871248981496
 2    Col1  Col2
 3 0   0.0   0.0
 4
 5         Col1      Col2
 6 38  0.886364  0.181818
 7 39  0.931818  0.181818
 8 36  0.750000  0.227273
 9 34  0.840909  0.272727
10 37  0.818182  0.204545
11 32  0.681818  0.272727
12 35  0.636364  0.227273
13 33  0.568182  0.340909
14 30  0.681818  0.386364
15 31  0.568182  0.340909
16 23  0.568182  0.545455
17 27  0.477273  0.477273
18 22  0.704545  0.590909
19 28  0.840909  0.454545
20 24  0.863636  0.522727
21 26  0.818182  0.500000
22 25  0.750000  0.500000
23 29  0.772727  0.431818
24
25         Col1      Col2
26 6   0.840909  0.931818
27 12  0.840909  0.863636
28 3   0.931818  0.954545
29 4   0.977273  0.954545
30 1   0.909091  1.000000
31 2   0.863636  0.977273
32 10  1.000000  0.886364
33 8   0.909091  0.909091
34 13  0.931818  0.863636
35
36         Col1      Col2
37 20  0.181818  0.750000
```

```
38 19   0.272727   0.772727
39 21   0.250000   0.750000
40 9    0.272727   0.886364
41 15   0.250000   0.840909
42 5    0.204545   0.931818
43 7    0.159091   0.909091
44 14   0.181818   0.840909
45 11   0.136364   0.863636
46 18   0.113636   0.818182
47 16   0.409091   0.840909
48 17   0.545455   0.840909
49
50 cluster sse: 0.05517891988062442 , cluster length: 4
   threshold: 0.2976871248981496
51
52
53
54 Process finished with exit code 0
55
```