

1. 详见 `train_normalized.csv`

2.

```
Cluster Counts:
```

```
2      339
```

```
4      263
```

```
1      214
```

```
3      206
```

```
0      146
```

```
Name: Cluster, dtype: int64
```

3.

```
# 输出聚类结果
```

```
print("Number of clusters:", n_clusters)
```

```
[15]
```

```
..    Number of clusters: 8
```

4.



