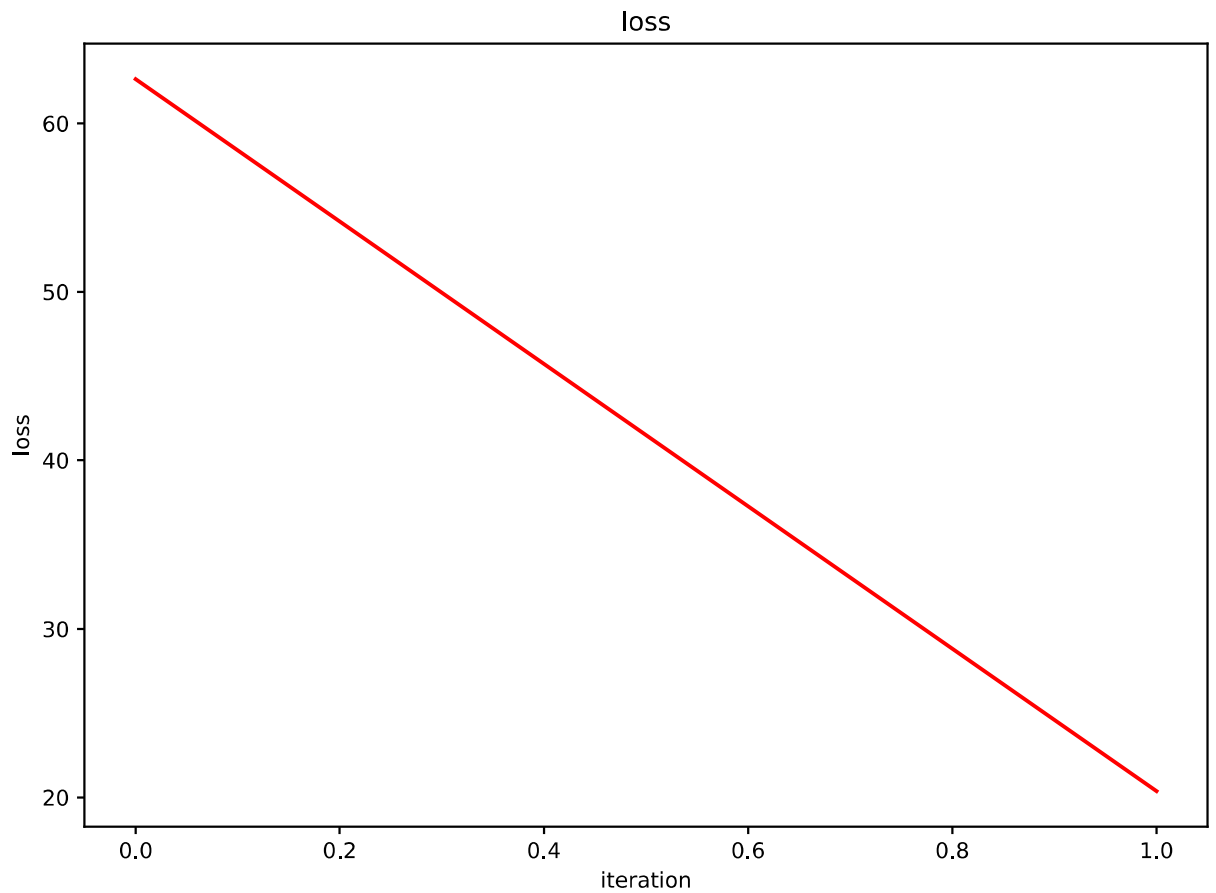


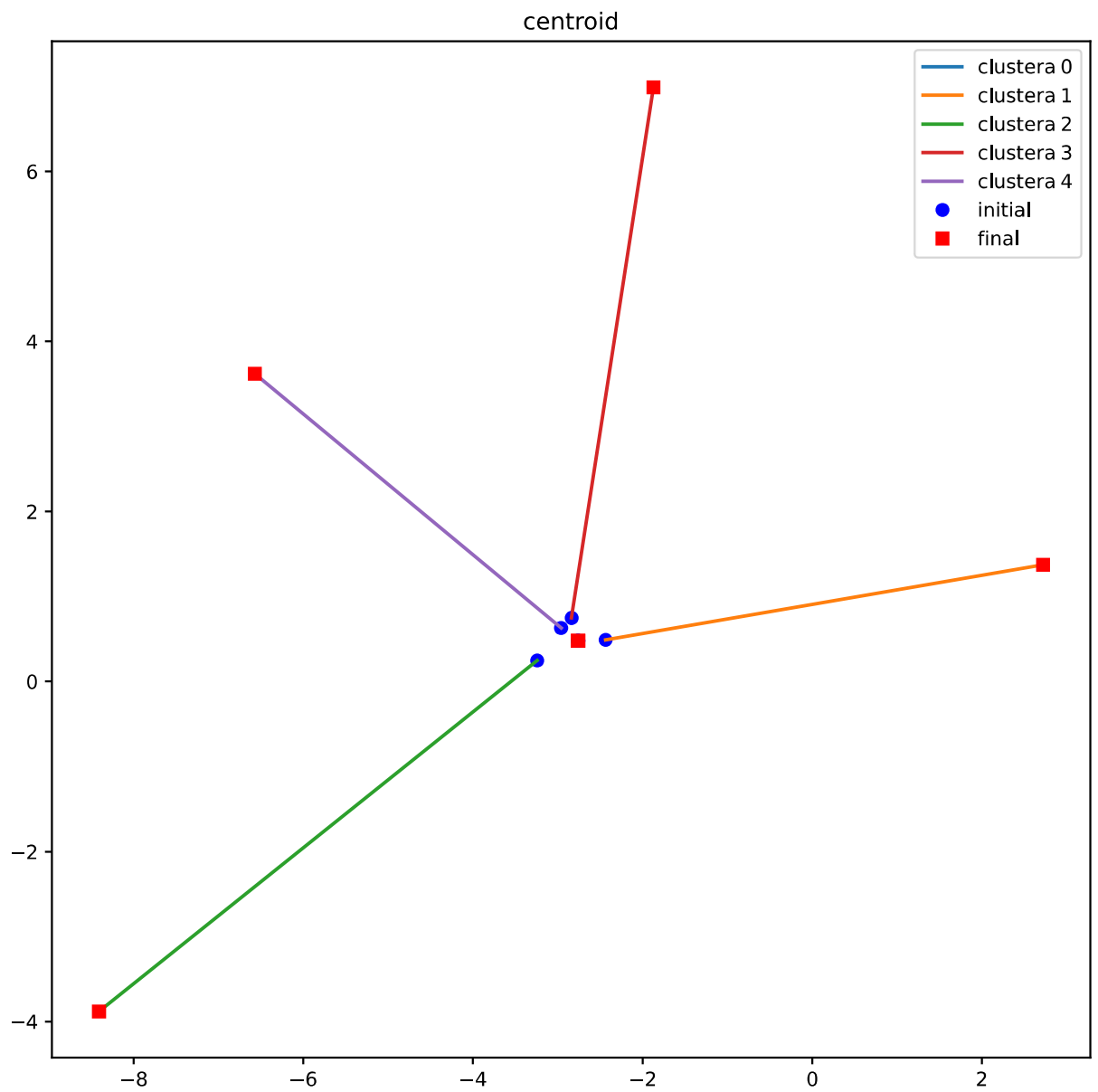
1. plot the loss over the iterations with the number of clusters being 5

```
In [88]: plot_loss_curve(loss_iteration)
```



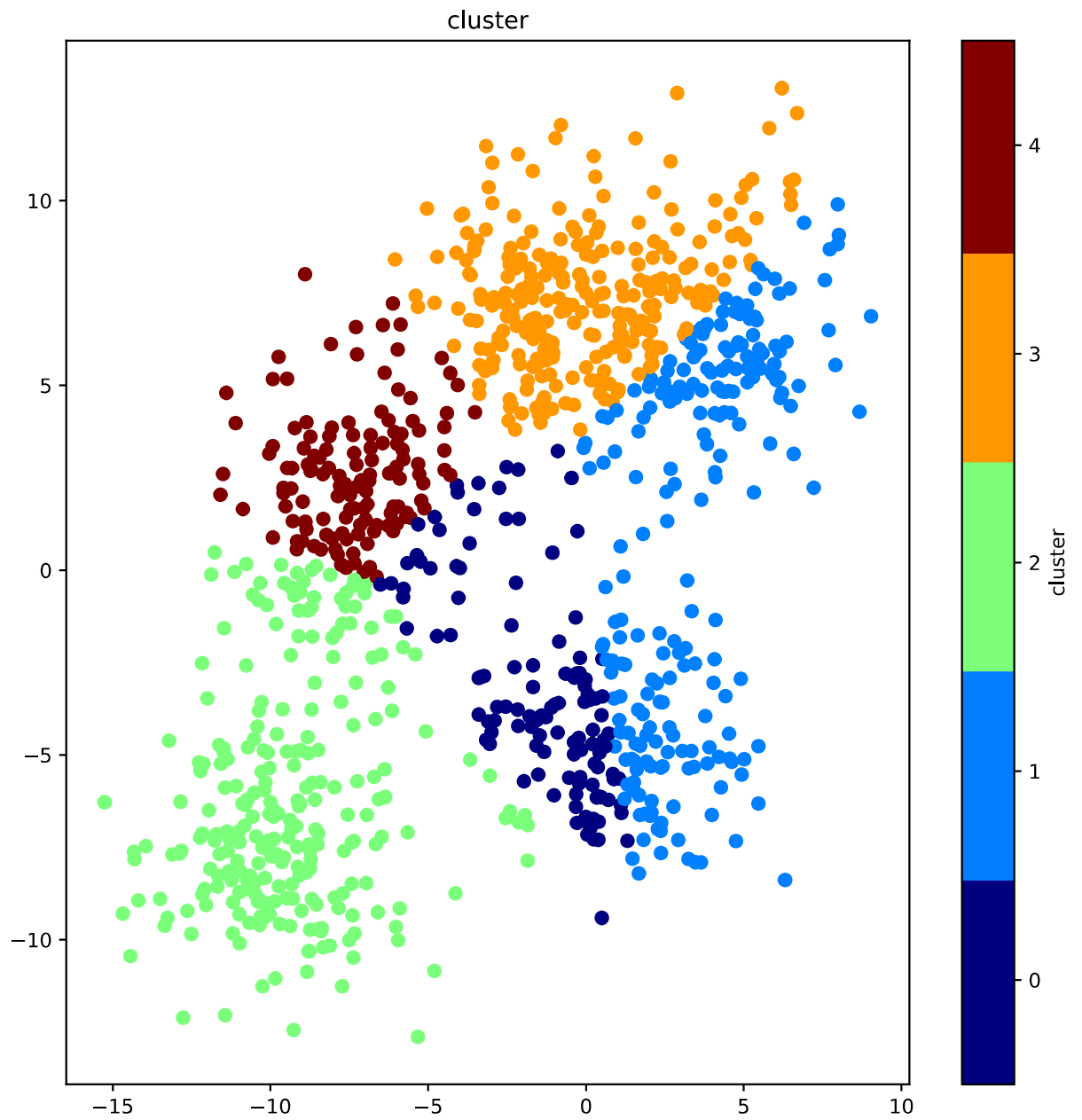
-
1. plot the trajectory of the centroid for each cluster (blue circle for the initial and red square for the final) with the number of clusters being 5

```
In [89]: plot_centroid(centroid_iteration)
```



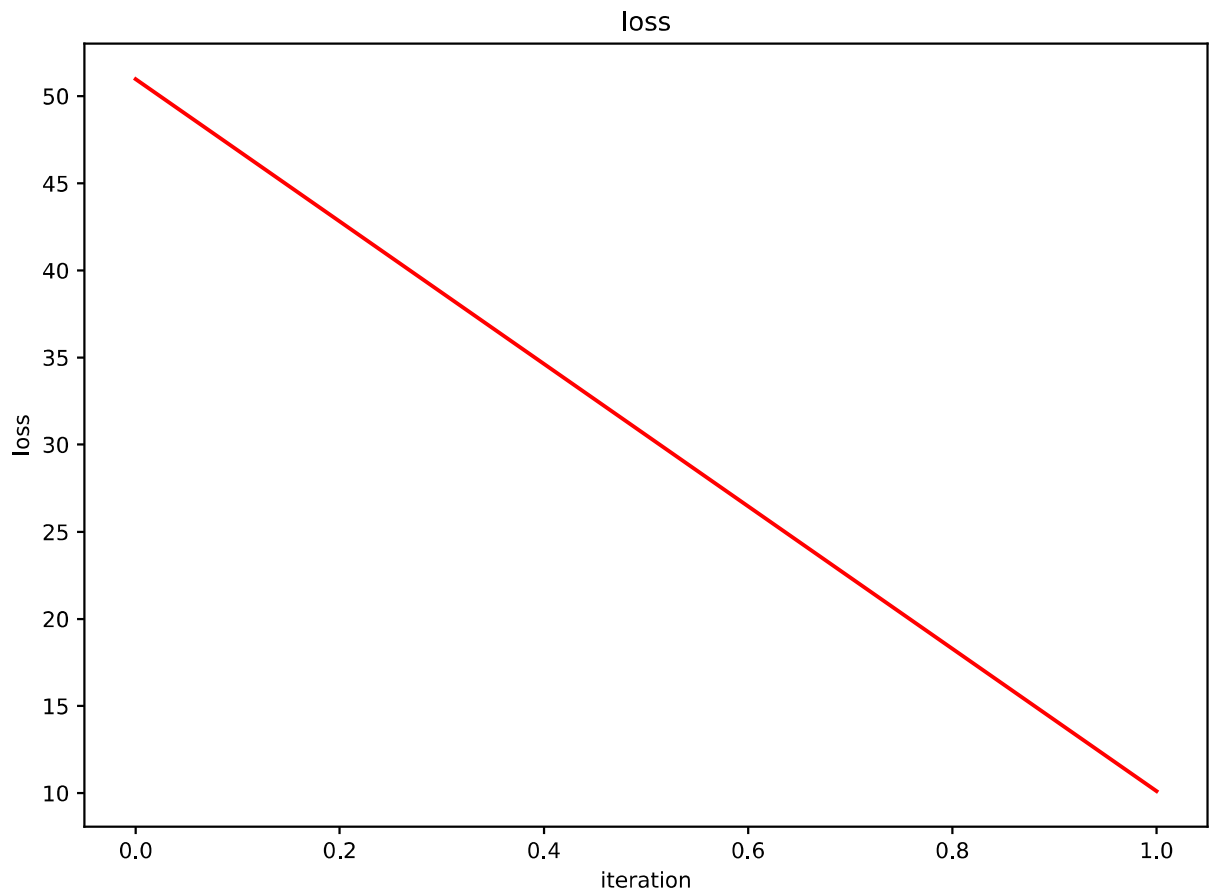
1. plot the final clustering result with the number of clusters being 5

```
In [90]: plot_cluster(feature, label_feature, label_cluster)
```



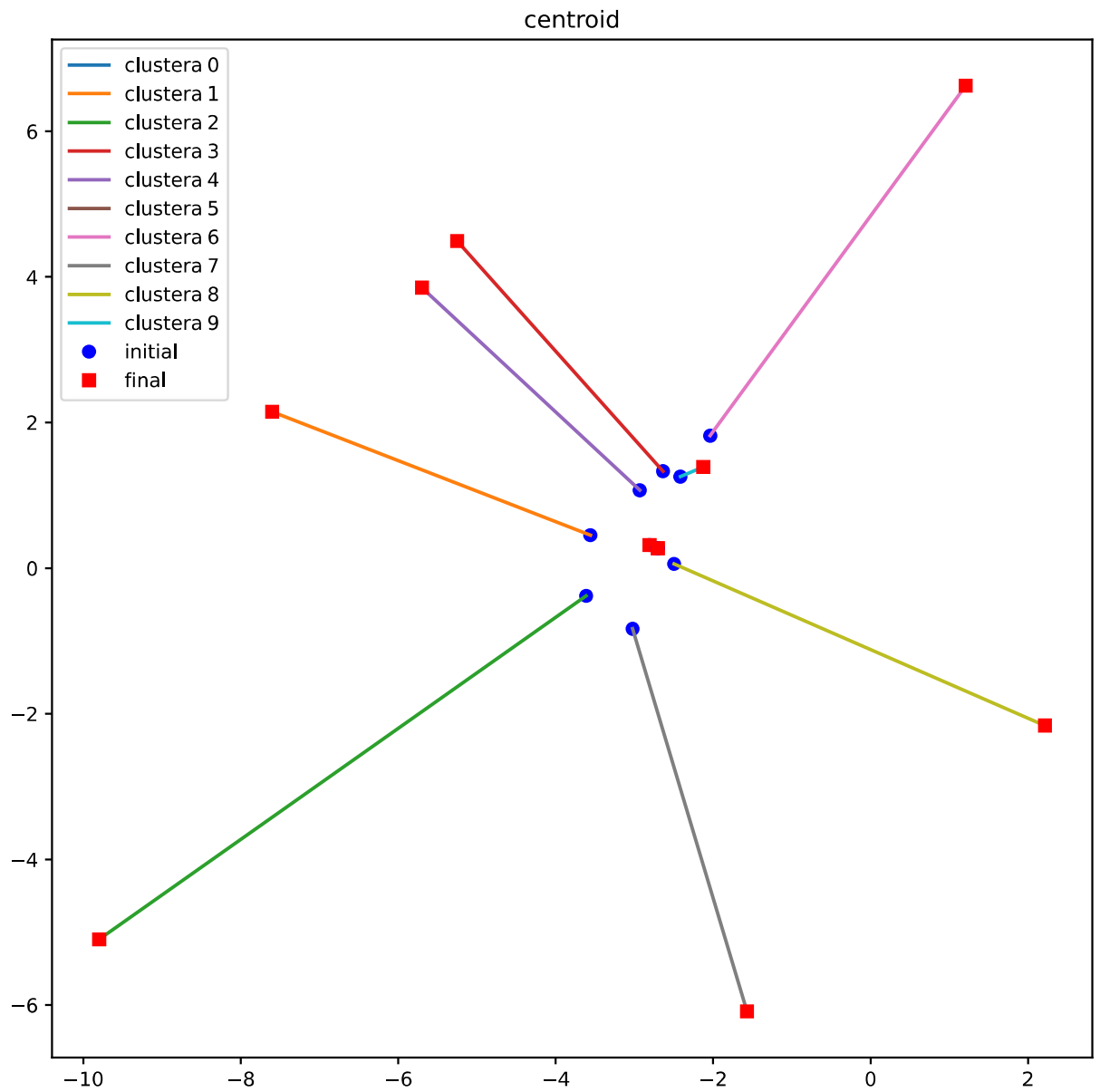
1. plot the loss over the iterations with the number of clusters being 10

```
In [97]: plot_loss_curve(loss_iteration)
```



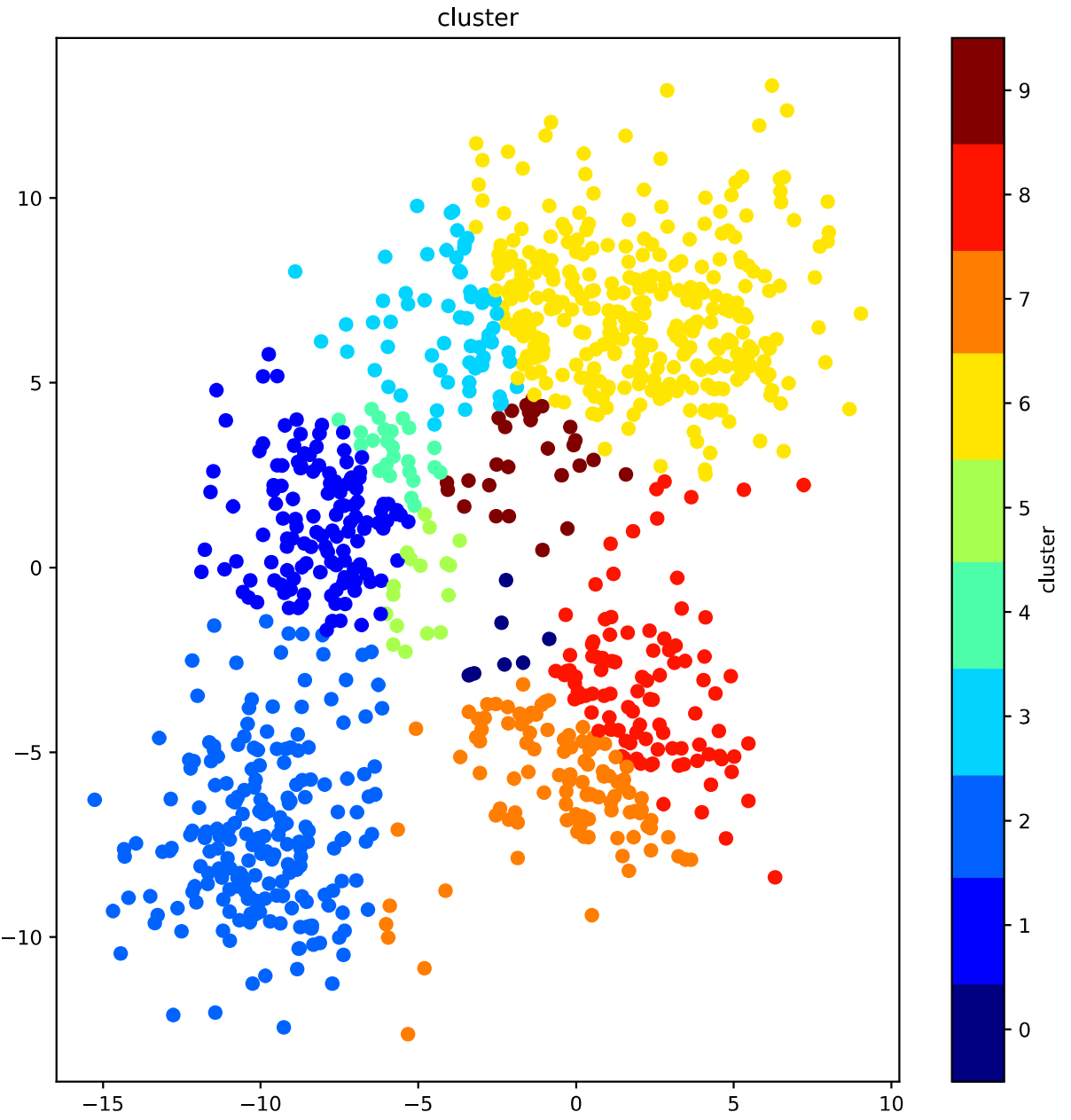
-
1. plot the trajectory of the centroid for each cluster (blue circle for the initial and red square for the final) with the number of clusters being 10

```
In [98]: plot_centroid(centroid_iteration)
```



1. plot the final clustering result with the number of clusters being 10

```
In [99]: plot_cluster(feature, label_feature, label_cluster)
```



In []: