

Data Science

Assignment 3 Guideline

In this assignment, I used Windows 11 with Python to create and run the code.

To run clustering.py code, you have use the command line format:

```
python [python script] [input data file name] [n] [eps] [MinPts]
```

Running commad:

- `python clustering.py input1.txt 8 15 22`

```
PS C:\Users\DeRoxy\Documents\GitHub\HYU-DataScience-Clustering-Classification-by-using-DBSCAN>
C:/Users/DeRoxy/AppData/Local/Microsoft/WindowsApps/python3.10.exe clustering.py 'Assignment_3_
files\Assignment 3 input data\input1.txt' 8 15 22
```

- `python clustering.py input2.txt 5 2 7`

```
PS C:\Users\DeRoxy\Documents\GitHub\HYU-DataScience-Clustering-Classification-by-using-DBSCAN>
C:/Users/DeRoxy/AppData/Local/Microsoft/WindowsApps/python3.10.exe clustering.py 'Assignment_3_
files\Assignment 3 input data\input2.txt' 5 2 7
```

- `python clustering.py input3.txt 4 5 5`

```
PS C:\Users\DeRoxy\Documents\GitHub\HYU-DataScience-Clustering-Classification-by-using-DBSCAN>
C:/Users/DeRoxy/AppData/Local/Microsoft/WindowsApps/python3.10.exe clustering.py 'Assignment_3_
files\Assignment 3 input data\input3.txt' 4 5 5
```

Before testing - Please put the following files in a same directory:

- Testing program
- your output files
- given input files
- attached answer files(~ideal.txt)

```

▼ input3_test_folder_euqd
  ≡ input3_cluster_0_ideal.txt
  ≡ input3_cluster_0.txt
  ≡ input3_cluster_1_ideal.txt
  ≡ input3_cluster_1.txt
  ≡ input3_cluster_2_ideal.txt
  ≡ input3_cluster_2.txt
  ≡ input3_cluster_3_ideal.txt
  ≡ input3_cluster_3.txt
  ≡ input3.txt
  ≡ PA3.exe

```

Testing:

- **command:** & PA3.exe input1
- **score:** 98.98035% or 99%

```
● PS C:\Users\DeRoxy\Documents\GitHub\HYU-DataScience-Clustering-Classification
-by-using-DBSCAN\Assignment_3_files\input1_test_folder_euqd> & "C:\Users\DeRo
xy\Documents\GitHub\HYU-DataScience-Clustering-Classification-by-using-DBSCAN
\Assignment_3_files\Assignment 3 self test\PA3.exe" input1
○ 98.98035?
```

- **command:** & PA3.exe input2
- **score:** 94.86598% or 95%

```
● PS C:\Users\DeRoxy\Documents\GitHub\HYU-DataScience-Clustering-Classification
-by-using-DBSCAN\Assignment_3_files\input2_test_folder_euqd> & "C:\Users\DeRo
xy\Documents\GitHub\HYU-DataScience-Clustering-Classification-by-using-DBSCAN
\Assignment_3_files\Assignment 3 self test\PA3.exe" input2
○ 94.86598?
```

- **command:** & PA3.exe input3
- **score:** 99.97736% or 99%

```
● PS C:\Users\DeRoxy\Documents\GitHub\HYU-DataScience-Clustering-Classification
-by-using-DBSCAN\Assignment_3_files\input3_test_folder_euqd> & "C:\Users\DeRo
xy\Documents\GitHub\HYU-DataScience-Clustering-Classification-by-using-DBSCAN
\Assignment_3_files\Assignment 3 self test\PA3.exe" input3
○ 99.97736?
```