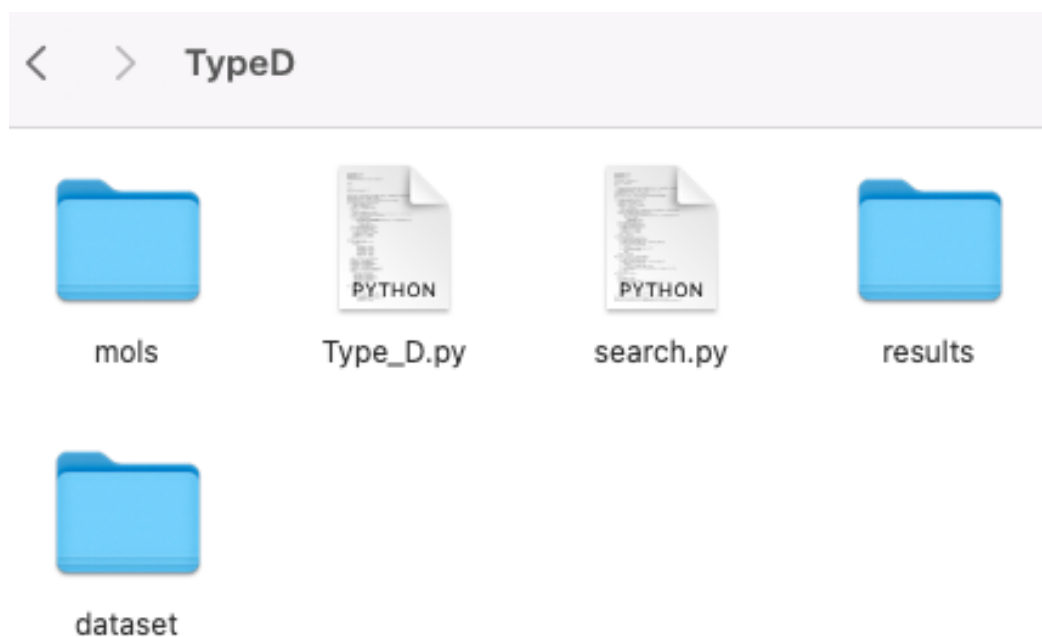


README file for Type D



1. mols: the conformation files of each molecule in the dataset are stored in XYZ format.

2. Type_D.py: the code to generate the feature matrix using Type D descriptors.

```
Type_D.py x
3 import os
4 import networkx as nx
5 from sklearn.preprocessing import MinMaxScaler
6
7 a = 2.3
8 b = 4.1
9
10 n = 50
11
12 list_cc_path = "mols/list_cc"
13 mols_dir = "mols/mols"
14
15 molecule info = pd.read_csv(list_cc_path, sep=''
```

You can modify n to obtain different descriptors.

| Variables in the code | Variables in the article |
|-----------------------|--------------------------|
| a | ϵ_1 |
| b | ϵ_n |
| n | n |

The table above shows the correspondence between the variables in the code and those in the article.

3. `search.py`: the code to explain the reason why we set $\epsilon_1 = 2.3$ and $\epsilon_n = 4.1$, which is detailed in Section 4 of the SI.

4. `results`: the results of descriptive statistics measured on the graph.

5. `dataset`: the feature matrices corresponding to different values of n are used for model selection.