## Cara Menjalankan

Buat folder tmp, dan virtual environment, dan install requirements untuk mac dan gnu/linux:

```
1 mkdir tmp
2 python3 -m venv venv
3 source venv/bin/activate
4 pip3 install -r requirements.txt
```

Untuk windows:

```
1 mkdir tmp
2 python -m venv venv
3 venv\Scripts\activate
4 pip install -r requirements.txt
```

atau:

```
mkdir tmp
virtualenv venv
venv\Scripts\activate
pip install -r requirements.txt
```

Kalau yang windows venvnya salah commandnya, bisa di browsing kak hehe saya ga pake windows soalnya maaf kak  $\bot$ 

Selanjutnya jalankan search.py.

Perhatikan bahwa signature fungsi retrieve:

```
def retrieve_[method scoring](self, query, k=10, optimize=True, debug=False):
```

## Flag optimize digunakan untuk menggunakan Top-K Wand Algorithm.

Hasil menggunakan retrieve\_tfidf

```
Query : alkylated with radioactive iodoacetate
 2
   Results:
   Document Name
 3
                                  Score
   ./collection/6/507.txt
                                  24.036
5
   ./collection/6/554.txt
                                 11.771
   ./collection/11/1003.txt
                                 9.404
    ./collection/4/388.txt
 7
                                  8.386
   ./collection/4/387.txt
                                 8.386
 8
9
   ./collection/11/1018.txt
                                  6.765
10
   ./collection/2/144.txt
                                  6.765
   ./collection/2/119.txt
                                  6.765
11
   ./collection/3/247.txt
12
                                  6.765
```

```
13
    ./collection/6/512.txt
                                   6.765
14
    Query : psychodrama for disturbed children
15
16
   Results:
17
   Document Name
                                   Score
    ./collection/9/820.txt
                                   20.276
18
   ./collection/10/918.txt
                                   12.965
19
    ./collection/9/821.txt
                                   12.948
20
21
    ./collection/1/36.txt
                                   11.402
   ./collection/9/817.txt
                                  11.243
2.2
    ./collection/10/926.txt
23
                                  10.335
    ./collection/8/799.txt
                                   10.335
2.4
25
   ./collection/10/927.txt
                                  10.072
    ./collection/1/99.txt
26
                                   9.199
    ./collection/2/100.txt
                                   9.199
2.7
28
29
    Query : lipid metabolism in toxemia and normal pregnancy
30
   Results:
31
   Document Name
                                   Score
32
   ./collection/1/7.txt
                                   28.687
   ./collection/2/159.txt
33
                                   18.274
34
    ./collection/4/328.txt
                                   17.877
35
   ./collection/4/306.txt
                                   17.659
36
   ./collection/1/81.txt
                                  16.615
37
    ./collection/4/329.txt
                                   12.836
38
   ./collection/3/288.txt
                                  12.630
39
   ./collection/4/371.txt
                                  11.406
    ./collection/9/881.txt
                                   10.723
40
    ./collection/3/201.txt
                                   10.566
41
```

## Hasil menggunakan retrieve bm25

```
[nltk_data] Downloading package stopwords to /home/hocky/nltk_data...
 2
   [nltk_data] Package stopwords is already up-to-date!
    [nltk data] Downloading package punkt to /home/hocky/nltk data...
   [nltk_data] Package punkt is already up-to-date!
 4
    Query : alkylated with radioactive iodoacetate
 5
    Results:
 7
   Document Name
                                   Score
    ./collection/6/507.txt
                                   21.465
 8
    ./collection/11/1003.txt
                                   9.548
9
   ./collection/6/554.txt
10
                                   8.549
11
   ./collection/6/506.txt
                                   7.108
   ./collection/8/793.txt
                                   7.082
12
   ./collection/2/119.txt
                                   6.724
13
   ./collection/4/387.txt
14
                                   6.574
    ./collection/3/247.txt
15
                                   6.178
```

```
16 ./collection/8/745.txt
                                 6.015
17
   ./collection/11/1018.txt
                                 5.882
18
19
   Query : psychodrama for disturbed children
20
   Results:
21
   Document Name
                                 Score
22
   ./collection/9/820.txt
                                19.885
23
   ./collection/9/821.txt
                                10.632
   ./collection/1/36.txt
24
                                 9.860
25
   ./collection/10/918.txt
                                9.477
   ./collection/9/817.txt
                                8.179
26
27
   ./collection/10/926.txt
                                 8.087
   ./collection/9/814.txt
                                7.642
28
   ./collection/1/99.txt
29
                                7.552
   ./collection/9/894.txt
30
                                 7.358
   ./collection/5/493.txt
31
                                7.355
32
33
   Query : lipid metabolism in toxemia and normal pregnancy
34
   Results:
35
   Document Name
                                 Score
36
   ./collection/1/7.txt
                                 26.316
37
   ./collection/4/328.txt
                                 17.556
38
   ./collection/4/306.txt
                                14.148
39
   ./collection/2/159.txt
                                13.300
   ./collection/1/81.txt
40
                                10.982
41
   ./collection/7/602.txt
                                10.343
42
   ./collection/4/371.txt
                                9.948
   ./collection/4/329.txt
43
                                 9.542
   ./collection/3/288.txt
44
                                 8.923
45 ./collection/1/12.txt
                                 8.415
```