

202014068_이민준

```
!pip install konlpy
!pip install jpype1==1.0.2
```

```
import os
os.environ["JAVA_HOME"] = "/usr/lib/jvm/java-11-openjdk-amd64"
```

```
from konlpy.tag import Okt
```

```
Collecting konlpy
  Downloading konlpy-0.6.0-py2.py3-none-any.whl.metadata (1.9 kB)
Collecting JPype1>=0.7.0 (from konlpy)
  Downloading jpype1-1.5.2-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl.metadata (4.9 kB)
Requirement already satisfied: lxml>=4.1.0 in /usr/local/lib/python3.11/dist-packages (from konlpy) (5.3.1)
Requirement already satisfied: numpy>=1.6 in /usr/local/lib/python3.11/dist-packages (from konlpy) (2.0.2)
Requirement already satisfied: packaging in /usr/local/lib/python3.11/dist-packages (from JPype1>=0.7.0->konlpy) (24.2)
Downloading konlpy-0.6.0-py2.py3-none-any.whl (19.4 MB)
19.4/19.4 MB 46.5 MB/s eta 0:00:00
Downloading jpype1-1.5.2-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (494 kB)
494.1/494.1 kB 36.2 MB/s eta 0:00:00
Installing collected packages: JPype1, konlpy
Successfully installed JPype1-1.5.2 konlpy-0.6.0
Collecting jpype1==1.0.2
  Downloading JPype1-1.0.2.tar.gz (748 kB)
748.1/748.1 kB 9.6 MB/s eta 0:00:00
  Preparing metadata (setup.py) ... done
Building wheels for collected packages: jpype1
  error: subprocess-exited-with-error

  × python setup.py bdist_wheel did not run successfully.
  | exit code: 1
  | See above for output.

  note: This error originates from a subprocess, and is likely not a problem with pip.
Building wheel for jpype1 (setup.py) ... error
ERROR: Failed building wheel for jpype1
Running setup.py clean for jpype1
Failed to build jpype1
ERROR: ERROR: Failed to build installable wheels for some pyproject.toml based projects (jpype1)
```

```
import pandas as pd
from konlpy.tag import Okt
```

```
# 간단한 감성 사전 정의
```

```
pos_words = ['좋다', '행복', '맛있', '좋아', '즐겁']
neg_words = ['싫', '별로', '지루', '실망', '어렵', '어려워']
```

```
# 감성 분석 함수
```

```
def analyze_sentiment(sentence):
    okt = Okt()
    tokens = okt.morphs(sentence)

    pos_count = sum(1 for word in tokens if any(p in word for p in pos_words))
    neg_count = sum(1 for word in tokens if any(n in word for n in neg_words))

    total = pos_count + neg_count

    if total == 0:
        return 0.0, 0.0
    score = (pos_count - neg_count) / total
    ratio = total / len(tokens)
    return score, ratio
```

```
# 텍스트 불러오기
```

```
df = pd.read_csv("text_data_1.txt", header=None, names=["sentence"])
```

```
# 분석 적용
```

```
scores, ratios = [], []
for sentence in df['sentence']:
    score, ratio = analyze_sentiment(sentence)
    scores.append(score)
    ratios.append(ratio)
```

```
df['score'] = scores
df['ratio'] = ratios
```

```
print(df)
```

```

sentence score ratio
0  오늘 날씨가 너무 좋아서 기분이 좋다.  1.0  0.222222
1  이 영화는 정말 별로였어. 너무 지루했다. -1.0  0.200000
```

```
2     맛있는 음식을 먹어서 행복하다.    1.0  0.333333
3     이 책은 이해하기 어려워서 실망했다.  -1.0  0.250000
```