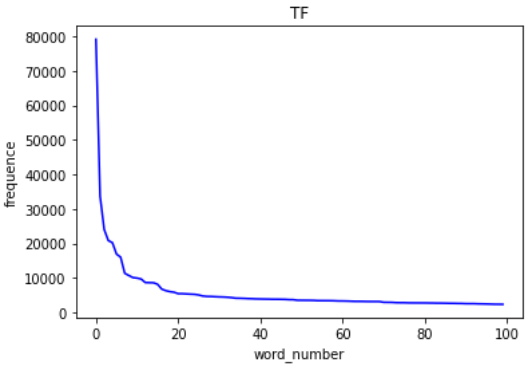
```
pip install jieba
```

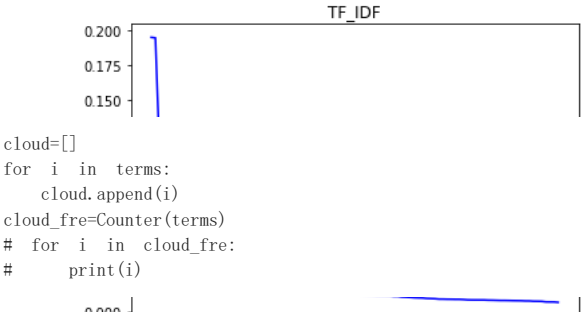
```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Requirement already satisfied: jieba in /usr/local/lib/python3.9/dist-packages (0.42.1)
```

```
pip install ArticutAPI
```

```
import jieba
content=""
with open('hw1.txt','r') as f:
    for line in f:
        content+=line.replace("\t","").replace(" ","").replace("\n","")

with open("stop.txt",'r',encoding='utf8') as f:
    stops=f.read()

terms =[t for t in jieba.cut(content,cut_all=False) if t not in stops ]

def get_TF(words,topk=100):
    tf_dic={}
    for word in words:
        tf_dic[word]=tf_dic.get(word,0)+1
    return sorted(tf_dic.items(),key=lambda x :x[1],reverse=True)[:topk]



import jieba.analyse as analyse
top100=get_TF(terms)
TF_IDF=jieba.analyse.extract_tags(content, topK=100, withWeight=True)



import matplotlib.pyplot as plt
import pandas as pd


count=[]
plt.xlabel('word_number')
plt.ylabel('frequence',)
plt.title('TF')
for i in range(100):
    count.append(top100[i][1])
plt.plot(range(100),count,color='b')
plt.show()
```



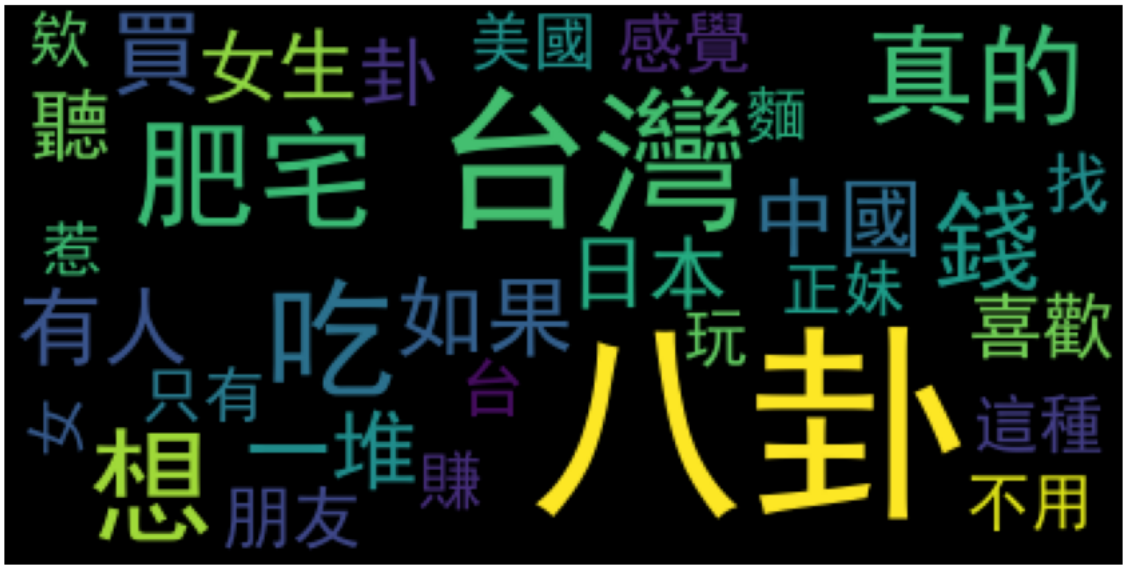

```
fre=[]
plt.xlabel('word_number')
plt.ylabel('weight',)
plt.title('TF_IDF')
for i in range(100):
    fre.append(TF_IDF[i][1])
plt.plot(range(100),fre,color='b')
plt.show()
```




```
cloud=[]
for  i  in  terms:
    cloud.append(i)
cloud_fre=Counter(terms)
#  for  i  in  cloud_fre:
#      print(i)
```

```
pip  install  wordcloud
```

```
from  wordcloud  import  WordCloud,  STOPWORDS
from  collections  import  Counter
wc  =  WordCloud(font_path='SimHei.ttf',max_words=32)
wc.generate_from_frequencies(cloud_fre)
plt.figure(figsize=(15,15))
plt.imshow(wc)
plt.axis("off")
plt.show()
```



✓ 1 秒 完成時間：晚上10:31