**Stock Exchange**

import json

import re

import numpy as np

from sklearn.pipeline import Pipeline

from sklearn.feature\_extraction.text import CountVectorizer

from sklearn.feature\_extraction.text import TfidfTransformer,TfidfVectorizer

from sklearn.svm import LinearSVC

from sklearn.naive\_bayes import MultinomialNB

from sklearn.linear\_model import SGDClassifier

count=0

topic=[]

question=[]

excerpt=[]

def words(text):

    return re.findall(r'(?:[a-zA-Z]+[a-zA-Z\'\-]?[a-zA-Z]|[a-zA-Z]+)',text)

with open('training.json', 'r') as f:

    for line in f:

        count+=1

        if count==1:

            continue

        post = json.loads(line)

        topic.append(post["topic"])

        abc=post["question"]+"\r\n"+post["excerpt"]

        sen="".join(word for word in words(abc))

        excerpt.append(abc)

x\_train=np.array(excerpt)

y\_train=topic

txt\_clf=Pipeline([('vect',CountVectorizer()),

                  ('tfidf',TfidfTransformer()),

                  ('clf',LinearSVC())])

txt\_clf.fit(x\_train, y\_train)

\_test=[]

for i in range(int(input())):

    h=json.loads(input())

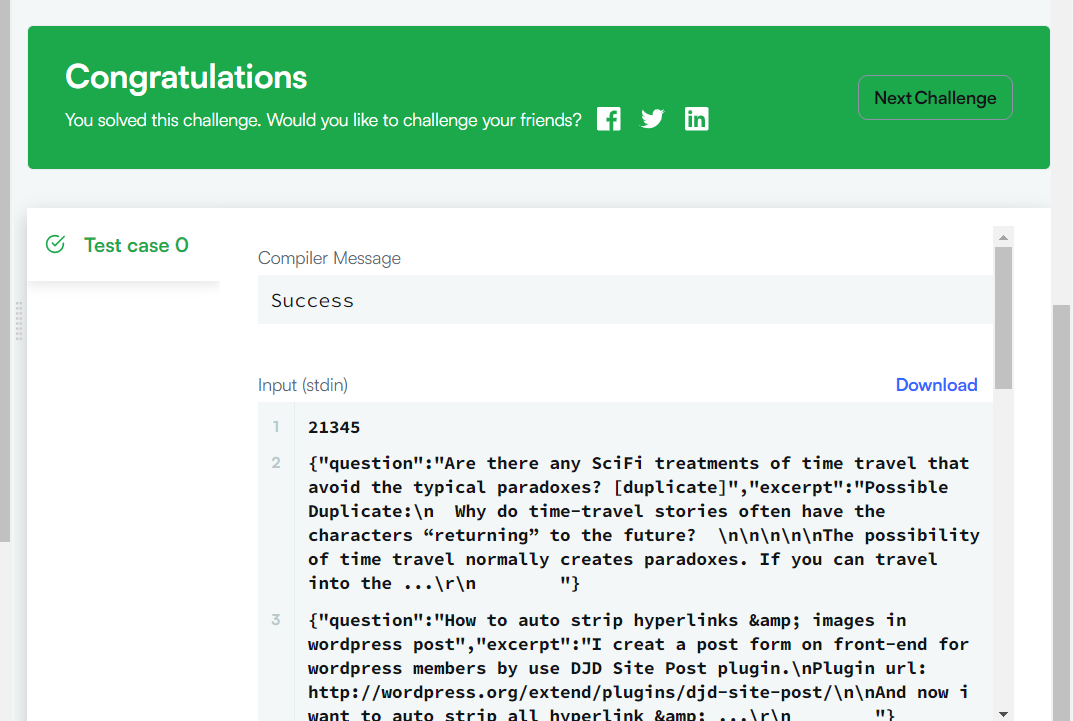
    \_test.append(h['question']+"\r\n"+h['excerpt'])

predicted=txt\_clf.predict(\_test)

for i in predicted:

    print(i)

**Output**

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