Exercise 13: Implementation of NLP programs

NLP programs:

Aim:

To check if the restaurant review was positive or negative using Natural Language Processing.

Algorithm:

Natural language processing is a subfield of linguistics, computer science, and artificial intelligence concerned with the interactions between computers and human language, in particular how to program computers to process and analyze large amounts of natural language dataPush the Goal state in to the Stack

1. Learn from given dataset using sklearn
2. Tokenize the keywords.
3. Take the input.
4. Check with given knowledge and give output.

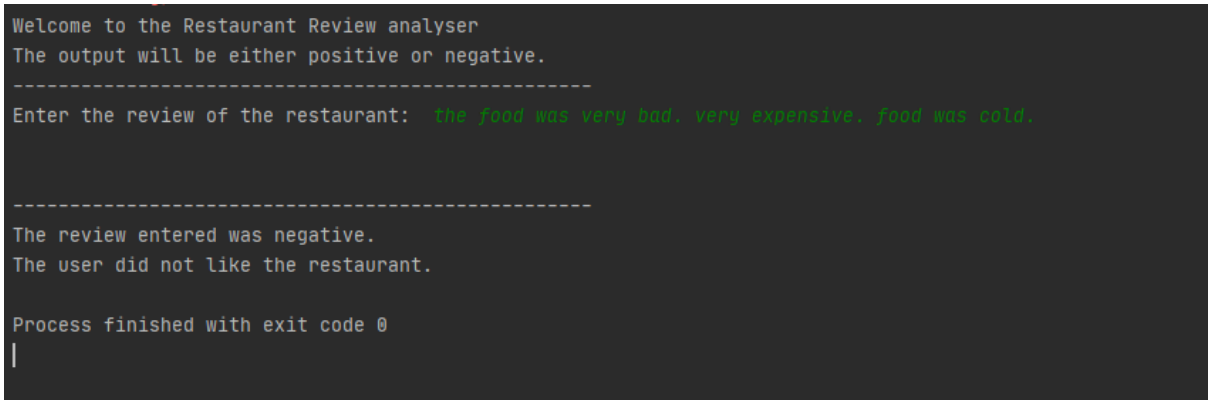
	Review	Liked
0	Wow... Loved this place.	1
1	Crust is not good.	0
2	Not tasty and the texture was just nasty.	0
3	Stopped by during the late May bank holiday of...	1
4	The selection on the menu was great and so wer...	1

Program:

```
import pickle

from sklearn.feature_extraction.text import CountVectorizer


filename = 'reviews_classifier.sav'


loaded_classifier = pickle.load(open(filename, 'rb'))


cv = CountVectorizer(max_features = 2000)
```

```
with open('corpus.data', 'rb') as filehandle:

    corpus = pickle.load(filehandle)
cv.fit_transform(corpus)



print("Welcome to the Restaurant Review analyser")
print("The output will be either positive or negative.")
print("--------------------------------------------------")
user_input=input("Enter the review of the restaurant:  ")

test = [user_input]
test_vec = cv.transform(test)
val=loaded_classifier.predict(test_vec)[0]

print("\n\n--------------------------------------------------")

if(val==0):
    print("The review entered was negative.")
    print("The user did not like the restaurant.")

if(val==1):
    print("The review entered was positive.")
    print("The user liked the restaurant.")
```

OUTPUT:



Result:

The given program was successfully coded and was successfully executed AWS compiler.