Sentiment Analysis

What is Sentiment Analysis?

Sentiment Analysis is contextual mining of text which identifies and extracts subjective information in source material, and helps a business to understand the social sentiment of their brand, product or service while monitoring online conversations.

How Sentiment Analysis Works?

Step 1: Tokenization

- Tokenization means dividing your para into a different set of statements or dividing a statement into a different set of words.

Step 2: Cleaning the data

- Cleaning the data means to remove all the special characters or any word that doesn't add value to the analysis.

Step 3: Removing the stop words

- Like we said before the words that don't add value to the analysis, words which are also known as stop words like (the/she/he/was/ etc) remove them.

Step 4: Classification

- Here our task will be to classify the word as positive, negative or neutral word.
- For positive word we give a sentiment score as +1, for negative word we give a sentiment score as -1 and for neutral word we give 0 as sentiment score

Step 5: Apply Supervised Algorithms for Classification

- Train your model with a bag of words or lexicons, and test it on the analyzing statement.
- More the accuracy score, the better will be the classification.

Let's see an example of sentiment analysis on a few tweets using the python module "textblob".

CODE:
Example 1:

```
'''Sentiment analysis using pythons'''

# import textblob module
from textblob import TextBlob

# 1st tweet example
tweet1 = "The food at Taj was awesome."

t1 = TextBlob(tweet1)

# printing sentiment score
print(t1.sentiment)
```

Output:

Here, Polarity measure will tell you how positive your statement is or how negative your statement is, and Subjectivity expresses personal feelings, views or beliefs.

Example 2:

```
# 2nd tweet example
tweet2 = "The movie was not so good."

t2 = TextBlob(tweet2)

# printing sentiment score
print(t2.sentiment)
```

Output:

```
Sentiment(polarity=0.7,
          subjectivity=0.6000000000000001)
```