```
In [1]: Text = "I am learning NLP"
 In [2]: import pandas as pd
         pd.get_dummies(Text.split())
 Out[2]:
             I NLP am learning
          0 1
                             0
                  0
                     0
          1 0
                  0
                     1
                              0
          2 0
                 0
                     0
                             1
          3 0
                 1
                     0
                             0
 In [3]: | text = ["i love NLP and i will learn NLP in 2month"]
 In [5]: from sklearn.feature_extraction.text import CountVectorizer
         vectorizer = CountVectorizer()
         vectorizer.fit(text)
         vector = vectorizer.transform(text)
 In [7]: |print(vectorizer.vocabulary_)
         print(vector.toarray())
          {'love': 4, 'nlp': 5, 'and': 1, 'will': 6, 'learn': 3, 'in': 2, '2month':
         [[1 1 1 1 1 2 1]]
 In [8]: print(vector)
            (0, 0)
                          1
            (0, 1)
                          1
            (0, 2)
                          1
            (0, 3)
                          1
            (0, 4)
                          1
            (0, 5)
                          2
            (0, 6)
                          1
In [9]: CountVectorizer?
         df = pd.DataFrame(data=vector.toarray(), columns=vectorizer.get_feature_nam
In [11]:
         df
Out[11]:
             2month and in learn love nlp will
          0
                                        2
```

In [19]: !pip install TextBlob

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Requirement already satisfied: TextBlob in c:\users\pooja reddy\anaconda3
         \lib\site-packages (0.19.0)
         Requirement already satisfied: nltk>=3.9 in c:\users\pooja reddy\anaconda3
         \lib\site-packages (from TextBlob) (3.9.1)
         Requirement already satisfied: click in c:\users\pooja reddy\anaconda3\lib
         \site-packages (from nltk>=3.9->TextBlob) (8.0.4)
         Requirement already satisfied: joblib in c:\users\pooja reddy\anaconda3\li
         b\site-packages (from nltk>=3.9->TextBlob) (1.2.0)
         Requirement already satisfied: regex>=2021.8.3 in c:\users\pooja reddy\ana
         conda3\lib\site-packages (from nltk>=3.9->TextBlob) (2022.7.9)
         Requirement already satisfied: tqdm in c:\users\pooja reddy\anaconda3\lib
         \site-packages (from nltk>=3.9->TextBlob) (4.65.0)
         Requirement already satisfied: colorama in c:\users\pooja reddy\anaconda3
         \lib\site-packages (from click->nltk>=3.9->TextBlob) (0.4.6)
In [26]: text = "I am learning NLP"
In [27]: from textblob import TextBlob
         TextBlob(text).ngrams(1)
Out[27]: [WordList(['I']), WordList(['am']), WordList(['learning']), WordList(['NL
         P'])]
         import nltk
In [28]:
         nltk.download('punkt_tab')
         [nltk data] Downloading package punkt tab to C:\Users\Pooja
                         Reddy\AppData\Roaming\nltk_data...
         [nltk data]
         [nltk_data] Package punkt_tab is already up-to-date!
Out[28]: True
In [29]: TextBlob(text).ngrams(2)
Out[29]: [WordList(['I', 'am']),
          WordList(['am', 'learning']),
          WordList(['learning', 'NLP'])]
In [30]: TextBlob(text).ngrams(3)
Out[30]: [WordList(['I', 'am', 'learning']), WordList(['am', 'learning', 'NLP'])]
In [31]: TextBlob(text).ngrams(4)
Out[31]: [WordList(['I', 'am', 'learning', 'NLP'])]
In [32]: Text = ["The quick brown fox jumped over the lazy dog.", "The dog.", "The f
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In [33]: from sklearn.feature_extraction.text import TfidfVectorizer
    vectorizer = TfidfVectorizer()
    vectorizer.fit(Text)
    print(vectorizer.vocabulary_)
    print(vectorizer.idf_)

    {'the': 7, 'quick': 6, 'brown': 0, 'fox': 2, 'jumped': 3, 'over': 5, 'laz
        y': 4, 'dog': 1}
    [1.69314718 1.28768207 1.28768207 1.69314718 1.69314718 1.69314718
        1.69314718 1. ]
In []:
```