4/23/25, 10:59 AM AI4

```
In [1]: text_file = open("sentences.txt")
          text = text_file.read()
In [2]:
          print(type(text))
          <class 'str'>
In [3]:
          print(text)
          print("\n")
          QVC Network Inc. said it completed its acquisition of CVN Cos. for about $ 423 mil
          The spirits , of course , could hardly care less whether people do or do n't belie
          ve in them .
          The debt ceiling is scheduled to fall to $ 2.8 trillion from $ 2.87 trillion at mi
          dnight tonight .
In [4]: print(len(text))
          283
In [5]:
          import nltk
          from nltk import sent_tokenize
          from nltk import word_tokenize
In [6]: nltk.download('punkt')
          [nltk_data] Downloading package punkt to
          [nltk_data]
                         C:\Users\admine\AppData\Roaming\nltk_data...
          [nltk_data] Package punkt is already up-to-date!
          True
Out[6]:
          sentences = sent tokenize(text)
In [7]:
          print(len(sentences))
          3
In [8]: | words = word_tokenize(text)
          print(len(words))
          print(words)
          ['QVC', 'Network', 'Inc.', 'said', 'it', 'completed', 'its', 'acquisition', 'of', 'CVN', 'Cos.', 'for', 'about', '$', '423', 'million', '.', 'The', 'spirits', ',', 'of', 'course', ',', 'could', 'hardly', 'care', 'less', 'whether', 'people', 'do',
          'or', 'do', "n't", 'believe', 'in', 'them', '.', 'The', 'debt', 'ceiling', 'is', 'scheduled', 'to', 'fall', 'to', '$', '2.8', 'trillion', 'from', '$', '2.87', 'tri
          llion', 'at', 'midnight', 'tonight', '.']
In [9]: from nltk.probability import FreqDist
          fdist = FreqDist(words)
          fdist.most_common(10)
```

```
Out[9]: [('$', 3),
              ('.', 3),
              ('of', 2),
              ('The', 2),
               ',', 2),
              ('do', 2),
              ('to', 2),
              ('trillion', 2),
              ('QVC', 1),
              ('Network', 1)]
In [10]: from nltk.corpus import stopwords
             nltk.download('stopwords')
             stopwords = stopwords.words('english')
             print(stopwords)
            ['a', 'about', 'above', 'after', 'again', 'against', 'ain', 'all', 'am', 'an', 'an
d', 'any', 'are', 'aren', "aren't", 'as', 'at', 'be', 'because', 'been', 'before',
             'being', 'below', 'between', 'both', 'but', 'by', 'can', 'couldn', "couldn't",
             'd', 'did', 'didn', "didn't", 'do', 'does', 'doesn', "doesn't", 'doing', 'don'
                   , 'down', 'during', 'each', 'few', 'for', 'from', 'further', 'had', 'hadn<sup>'</sup>,
            "hadn't", 'has', 'hasn', "hasn't", 'have', 'haven', "haven't", 'having', 'he', "h
            e'd", "he'll", 'her', 'here', 'hers', 'herself', "he's", 'him', 'himself', 'his',
             'how', 'i', "i'd", 'if', "i'll", "i'm", 'in', 'into', 'is', 'isn', "isn't", 'it',
            "it'd", "it'll", "it's", 'its', 'itself', "i've", 'just', 'll', 'm', 'ma', 'me',
            'mightn', "mightn't", 'more', 'most', 'mustn', "mustn't", 'my', 'myself', 'needn', "needn't", 'no', 'nor', 'not', 'now', 'o', 'off', 'off', 'on', 'once', 'only', 'o r', 'other', 'our', 'ours', 'ourselves', 'out', 'over', 'own', 're', 's', 'same',
            'shan', "shan't", 'she', "she'd", "she'll", "she's", 'should', 'shouldn', "should n't", "should've", 'so', 'some', 'such', 't', 'than', 'that', "that'll", 'the', 't
            heir', 'theirs', 'them', 'themselves', 'then', 'there', 'these', 'they', "they'd",
             "they'll", "they're", "they've", 'this', 'those', 'through', 'to', 'too', 'under',
            'until', 'up', 've', 'very', 'was', 'wasn', "wasn't", 'we', "we'd", "we'll", "we'r e", 'were', 'weren't", "we've", 'what', 'when', 'where', 'which', 'whil e', 'who', 'whom', 'why', 'will', 'with', 'won', "won't", 'wouldn't",
             'y', 'you', "you'd", "you'll", 'your', "you're", 'yours', 'yourself', 'yourselve
             s', "you've"]
             [nltk data] Downloading package stopwords to
                                 C:\Users\admine\AppData\Roaming\nltk_data...
             [nltk_data]
            [nltk data] Package stopwords is already up-to-date!
            import string
In [11]:
            words_no_punc = [w for w in words if w not in string.punctuation]
In [12]:
In [13]: clean_words = []
             for w in words no punc:
                  if w not in stopwords:
                       clean words.append(w)
             print(clean_words)
             print("\n")
             print(len(clean words))
             ['QVC', 'Network', 'Inc.', 'said', 'completed', 'acquisition', 'CVN', 'Cos.',
            3', 'million', 'The', 'spirits', 'course', 'could', 'hardly', 'care', 'less', 'whe ther', 'people', "n't", 'believe', 'The', 'debt', 'ceiling', 'scheduled', 'fall', '2.8', 'trillion', '2.87', 'trillion', 'midnight', 'tonight']
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32

4/23/25, 10:59 AM Al4