```
In [1]:
        import nltk
         from nltk.corpus import stopwords
         stopwords.words('english')
           ر ۱ ۱۱د ـ
          'ma',
          'mightn',
          "mightn't",
          'mustn',
          "mustn't",
          'needn',
          "needn't",
          'shan',
          "shan't",
          'shouldn',
          "shouldn't",
          'wasn',
          "wasn't",
          'weren',
          "weren't",
          'won',
          "won't"
          'wouldn',
          "wouldn't"]
In [4]:
        entries=nltk.corpus.cmudict.entries()
         len(entries)
         for entry in entries[10000:10025]:
             print(entry)
         ('belford', ['B', 'EH1', 'L', 'F', 'ER0', 'D'])
         ('belfry', ['B', 'EH1', 'L', 'F', 'R', 'IY0'])
         ('belgacom', ['B', 'EH1', 'L', 'G', 'AH0', 'K', 'AA0', 'M'])
         ('belgacom', ['B', 'EH1', 'L', 'JH', 'AH0', 'K', 'AA0', 'M'])
         ('belgard', ['B', 'EH0', 'L', 'G', 'AA1', 'R', 'D'])
         ('belgarde', ['B', 'EH0', 'L', 'G', 'AA1', 'R', 'D', 'IY0'])
         ('belge', ['B', 'EH1', 'L', 'JH', 'IY0'])
         ('belger', ['B', 'EH1', 'L', 'G', 'ER0'])
('belgian', ['B', 'EH1', 'L', 'JH', 'AH0', 'N'])
         ('belgians', ['B', 'EH1', 'L', 'JH', 'AH0', 'N', 'Z'])
         ('belgique', ['B', 'EH0', 'L', 'ZH', 'IY1', 'K'])
         ("belgique's", ['B', 'EH0', 'L', 'JH', 'IY1', 'K', 'S'])
         ('belgium', ['B', 'EH1', 'L', 'JH', 'AH0', 'M'])
         ("belgium's", ['B', 'EH1', 'L', 'JH', 'AH0', 'M', 'Z'])
         ('belgo', ['B', 'EH1', 'L', 'G', 'OW2'])
         ('belgrade', ['B', 'EH1', 'L', 'G', 'R', 'EY0', 'D'])
('belgrade', ['B', 'EH1', 'L', 'G', 'R', 'AA2', 'D'])
         ("belgrade's", ['B', 'EH1', 'L', 'G', 'R', 'EY0', 'D', 'Z'])
         ("belgrade's", ['B', 'EH1', 'L', 'G', 'R', 'AA2', 'D', 'Z'])
         ('belgrave', ['B', 'EH1', 'L', 'G', 'R', 'EY2', 'V'])
         ('beli', ['B', 'EH1', 'L',
                                      'IY0'])
         ('belich', ['B', 'EH1', 'L', 'IH0', 'K'])
         ('belie', ['B', 'IH0', 'L', 'AY1'])
         ('belied', ['B', 'IH0', 'L', 'AY1', 'D'])
         ('belief', ['B', 'IH0', 'L', 'IY1', 'F'])
```

```
from nltk.corpus import wordnet as wn
In [6]:
        wn.synsets('motocar')
        wn.synset('car.n.01').lemma_names()
Out[6]: ['car', 'auto', 'automobile', 'machine', 'motorcar']
In [7]: from nltk.corpus import wordnet as wn
        wn.synsets('good')
Out[7]: [Synset('good.n.01'),
         Synset('good.n.02'),
         Synset('good.n.03'),
         Synset('commodity.n.01'),
         Synset('good.a.01'),
         Synset('full.s.06'),
         Synset('good.a.03'),
         Synset('estimable.s.02'),
         Synset('beneficial.s.01'),
         Synset('good.s.06'),
         Synset('good.s.07'),
         Synset('adept.s.01'),
         Synset('good.s.09'),
         Synset('dear.s.02'),
         Synset('dependable.s.04'),
         Synset('good.s.12'),
         Synset('good.s.13'),
         Synset('effective.s.04'),
         Synset('good.s.15'),
         Synset('good.s.16'),
         Synset('good.s.17'),
         Synset('good.s.18'),
         Synset('good.s.19'),
         Synset('good.s.20'),
         Synset('good.s.21'),
         Synset('well.r.01'),
         Synset('thoroughly.r.02')]
In [8]: | from nltk.stem import PorterStemmer
        stemmerporter=PorterStemmer()
        stemmerporter.stem('happiness')
Out[8]: 'happi'
In [9]: | from nltk.stem import LancasterStemmer
        stemmerporter=LancasterStemmer()
        stemmerporter.stem('happiness')
Out[9]: 'happy'
```

```
from nltk.stem import RegexpStemmer
In [10]:
         stemmerregexp=RegexpStemmer('learn')
         stemmerregexp.stem('learning')
Out[10]: 'ing'
In [11]:
         from nltk.stem import SnowballStemmer
         SnowballStemmer.languages
         frenchstemmer=SnowballStemmer('french')
         frenchstemmer.stem('manges')
Out[11]: 'mang'
         sent="Become an expert in NLP"
In [12]:
         words=nltk.word tokenize(sent)
         print(words)
         ['Become', 'an', 'expert', 'in', 'NLP']
In [21]:
         texts="Nature is that natural and physical world that surrounds us and makes 1
         sentences=nltk.sent tokenize(texts)
         print(sentences)
         for text in texts:
             #sentences = nltk.sent tokenize(text)
             #print(sentences)
             for sentence in sentences:
                 words=nltk.word tokenize(sentence)
                 print(words)
                 tagged=nltk.pos_tag(words)
                 print(tagged)
```

['Nature is that natural and physical world that surrounds us and makes li fe possible on earth.', 'Nature is the heart of earth.', 'Nature heals us and helps build connection with our freedom, authenticity and our souls.', 'Simply connecting and feeling nature gives us a divine pleasure.', 'We ha ve a strong bond and emotional connection with nature.'] ['Nature', 'is', 'that', 'natural', 'and', 'physical', 'world', 'that', 's urrounds', 'us', 'and', 'makes', 'life', 'possible', 'on', 'earth', '.'] [('Nature', 'NN'), ('is', 'VBZ'), ('that', 'IN'), ('natural', 'JJ'), ('an d', 'CC'), ('physical', 'JJ'), ('world', 'NN'), ('that', 'WDT'), ('surroun ds', 'VBZ'), ('us', 'PRP'), ('and', 'CC'), ('makes', 'VBZ'), ('life', 'N N'), ('possible', 'JJ'), ('on', 'IN'), ('earth', 'NN'), ('.', '.')] ['Nature', 'is', 'the', 'heart', 'of', 'earth', '.'] [('Nature', 'NN'), ('is', 'VBZ'), ('the', 'DT'), ('heart', 'NN'), ('of', 'IN'), ('earth', 'NN'), ('.', '.')] ['Nature', 'heals', 'us', 'and', 'helps', 'build', 'connection', 'with', 'our', 'freedom', ',', 'authenticity', 'and', 'our', 'souls', ' [('Nature', 'NN'), ('heals', 'NNS'), ('us', 'PRP'), ('and', 'CC'), ('help s', 'VBZ'), ('build', 'VB'), ('connection', 'NN'), ('with', 'IN'), ('our', 'PRP\$'), ('freedom', 'NN'), (',', ','), ('authenticity', 'NN'), ('and', 'C In [ ]: