# Finding Antonyms And Synonym Using Python Natural Language Processing Toolkit



Natural Language Analysis with Python NLTK



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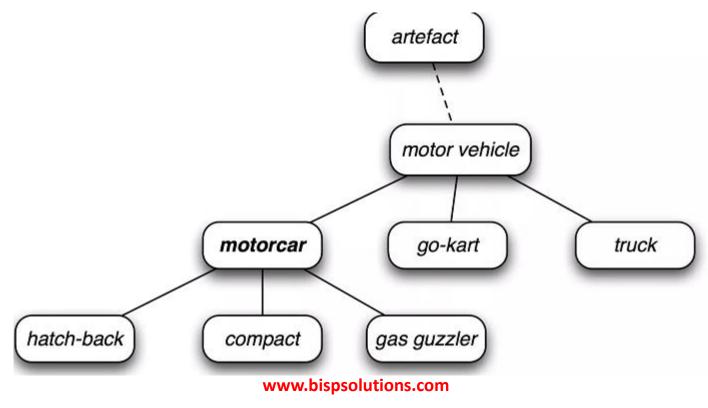
## Synonyms/Antonyms Using Python NLTK



#### **Step#1 Import NLTK and Wordnet**

import nltk from nltk.corpus import wordnet

**Wordnet** is a large collection of words and vocabulary from the English language that are related to each other and are grouped in some way. A collection of similar words is called lemmas.



# Synonyms/Antonyms Using Python NLTK



#### **Step#2 Declare 2 arrays to collect Synonyms and Antonyms**

```
array_synonyms = []
array_antonyms = []
```

#### Step#3 Retrieve all synonym using loop

**Synsets**: synonyms are words that have similar meanings. A synonym set, or **synset**, is a group of synonyms. A synset, therefore, corresponds to an abstract concept.

for vsyn in wordnet.synsets("good"):

Step#4 Retrieve synonym names (using lemmas name property)
And append it to array

The synonyms contained within a synset are called lemmas. You can access the string versions of these synonyms via a Synset's lemma names property

```
for I in vsyn.lemmas():
    print(I.name())
    array_synonyms.append(I.name())
```

### Synonyms/Antonyms Using Python NLTK



Step#5 Check Lemmas Antonyms method And append it to array\_antonyms array

```
if l.antonyms():
    array_antonyms.append(l.antonyms()[0].name())
```

#### Step#6 Print Array output

```
print(array_synonyms)
print(array_antonyms)
```



# Any Question?

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