### TOOL

# Library and Functions M2

Below are short examples of functions and methods that are used in Module 2.

## **Downloading Gutenberg Corpora from NLTK**

```
import nltk
nltk.download(['gutenberg'])
nltk.corpus.gutenberg.raw(txt_name)
nltk.corpus.gutenberg.words(txt_name)
nltk.corpus.gutenberg.sents(txt_name)
```

where txt\_name is string of text name in Gutenberg Library

#### **Tokenization**

```
import nltk
nlkt.sent_tokenize(s)
nlkt.word_tokenize(w)
```

where  $\mathbf{s}$  is sentence,  $\mathbf{w}$  is a word

#### **Normalization**

```
import unicodedata
unicodedata.normalize('NFKD', s).encode('ascii', 'ignore').
decode('utf-8', 'ignore')
```

## **Expanding Contractions**

```
import contractions
contractions.fix(t)
```

where **t** is a text



## **Using TextBlob's Word Object**

```
from textblob import Word
Word(w).correct()
Word(w).spellcheck()
```

## **Stemming and Lemmatization**

```
import nltk
pso = nltk.stem.PorterStemmer()
wlo = nltk.stem.WordNetLemmatizer()
pso.stem(s)
wlo.lemmatize(s,tag)
```

where tag is a POS tag