In the six exercises of this case study, we will find and plot the distribution of word frequencies for different translations of Hamlet. Perhaps the distribution of word frequencies of Hamlet depends on the translation -- let's find out!

For this case study, the functions **`count_words_fast`**, **`read_book`**, and **`word_stats`** are defined as in the Case 2 Videos (Videos 3.2.1 through 3.2.6). The code for these functions, which you will need for the following exercises, is given here:

```
import os
import pandas as pd
import numpy as np
from collections import Counter

def count_words_fast(text):
    text = text.lower()
    skips = [".", ",", ";", ":", "'", '"', "\n", "!", "?", "(", ")"]
    for ch in skips:
        text = text.replace(ch, "")
    word_counts = Counter(text.split(" "))
    return word_counts

def read_book(title_path):
    text   = pd.read_csv(title_path, sep = "\n", engine='python',
encoding="utf8")
    text = text.to_string(index = False)
    return text

def word_stats(word_counts):
    num_unique = len(word_counts)
    counts = word_counts.values()
    return (num_unique, counts)
```

Click the link to download the Jupyter Notebook for Case Study 2.