

BIS 420 PROGRAMMING FOR DATA SCIENCE
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CHAPTER 12 EXERCISE 12.3
ILLINOIS STATE UNIVERSITY

Write a function called `most_frequent` that takes a string and prints the letters in decreasing order of frequency. Find text samples from several different languages and see how letter frequency varies between languages. Compare your results with the tables at http://en.wikipedia.org/wiki/Letter_frequencies . Solution: [http:// thinkpython. com/code/ most_ frequent. py](http://thinkpython.com/code/most_frequent.py) .

```
from __future__ import print_function, division

def most_frequent(text):
    letter_count = get_frequency_dict(text)

    freq_pairs = []
    for char, count in letter_count.items():
        freq_pairs.append((count, char))

    freq_pairs.sort(reverse=True)

    sorted_letters = []
    for count, char in freq_pairs:
        sorted_letters.append(char)

    return sorted_letters

def get_frequency_dict(text):
    freq_dict = {}
    for char in text:
        freq_dict[char] = freq_dict.get(char, 0) + 1
    return freq_dict

def load_text(filepath):
    return open(filepath).read()

if __name__ == '__main__':
    content = load_text('/Users/prajaktapohare/Library/CloudStorage/OneDrive-ILStateUniversity/BIS420/Week 12/emma.txt')
    result = most_frequent(content)
    for letter in result:
        print(letter)
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