## The Adventures of Sherlock Holmes

**Total words in novel**: 104,410 **Total unique words in novel**: 8992

Most frequent words:



- 1. The 5248
- 2. 1 2993
- 3. And 2800
- 4. To 2654
- 5. Of 1683
- 6. A 2521
- 7. In 1683
- 8. That 1641
- 9. Was 1390
- 10. It 1273
- 11. You 1214
- 12. He 1155
- 13. ls 1105
- 14. His 1103
- 15. My 906
- 16. Have 902
- 17. Had 820
- 18. With 802
- 19. As 769
- 20. Which 761

## Most interesting frequent words:

### Without Lemmatization:

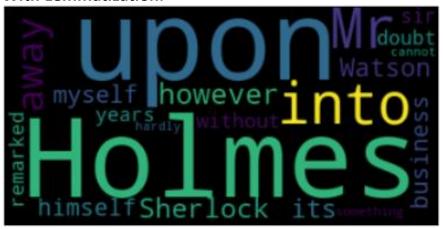


The list of common words does not include past tenses or plural words like asked, cried, seemed, eyes but their present and singular version are present.

So, to get the most interesting frequent words, we can use NLTK library to do lemmatization or having another exhaustive common word list.

- 1. Upon 462
- 2. Holmes 457
- 3. Into 275
- 4. Mr 271
- 5. Away 104
- 6. However 98
- 7. Sherlock 94
- 8. Its 89
- 9. Asked 988
- 10. Eyes 87
- 11. Watson 81
- 12. Myself 77
- 13. Himself 73
- 14. Business 73
- 15. Seen 72
- 16. Hands 72
- 17. Without 71
- 18. Cried 69
- 19. Seemed 68
- 20. Sir 67

# With Lemmatization:



# 20 Least Frequent words:



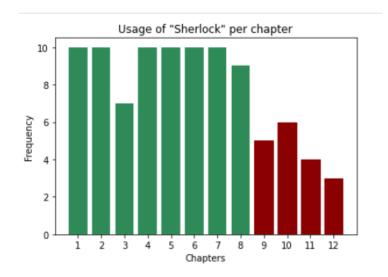
- 1. Walsall 1
- 2. Manifested 1
- 3. Violet 1
- 4. Mauritius 1
- 5. Solely 1
- 6. Survived 1
- 7. Stand 1
- 8. Locus 1
- 9. Freehanded 1
- 10. Kindspoken 1
- 11. Arguments 1
- 12. Blockaded 1
- 13. Seaman 1
- 14. Persevering 1
- 15. Brainfever 1
- 16. Slighted 1

- 17. Alices 1
- 18. Assembled 1
- 19. Relieve 1
- 20. Sobered 1

### Interesting word usage pattern:

The word Sherlock is interesting in the sense that it was used a very frequently in the beginning, and during the middle, and then the frequency decreases towards the end of the book.

Number of usages in each chapter of book [10, 10, 7, 10, 10, 10, 10, 9, 5, 6, 4, 3]



### **Favorite quote:**

"There is nothing more deceptive than an obvious fact" - Chapter 4

#### **Generated sentence:**

"Sherlock Holmes gravely Do you a black lace which you managed to a waste the upper lip to say nothing"

# **Sentence Autocomplete:**

print(p.getAutocompleteSentence('I have no do'))

['I have no do', 'I have no doubt', 'I have no doubts', 'I have no doubting', 'I have no doubtless', 'I have no doubted', 'I have no double', 'I have no doublebreasted', 'I have no doublebedded', 'I have no doubledged', 'I have no doubled', 'I have no doubly', 'I have no doing', 'I have no doings', 'I have no door', 'I have no doormat', 'I have no doors', 'I have no doorstep', 'I have no doorway', 'I have no doorthat', 'I have no dooties', 'I have no down', 'I have no downward', 'I have no downstairs', 'I have no dowry', 'I have no dont', 'I have no dont', 'I have no dock', 'I have no docketing', 'I have no docks', 'I have no doctor', 'I have no doctors', 'I have no document', 'I have no does', 'I have no does', 'I have no doesnt', 'I have no dodering', 'I have no dottles']

The autocomplete works by creating a Trie of all the words from the novel and given a sentence , it looks at the last incomplete word and try to predict all possible words.

If given a sentence, it does not guarantee that the entire sentence is part of the novel but only the current word for whom it is autocompleting. That is why it is possible that the entire sentence does not make any sense.

In the example given above, the function gives all possible words staring from Prefix "Do".