

ads1-hw-examples (/github/BenLangmead/ads1-hw-examples/tree/master)

/ hw2_query_subseq_index.ipynb (/github/BenLangmead/ads1-hw-examples/tree/master/hw2_query_subseq_index.ipynb)

```
In [1]: # Implement the query_subseq function
from subseq_index import SubseqIndex
from subseq_index_query import query_subseq
```

Example 1

```
In [2]: t = 'to-morrow and to-morrow and to-morrow creeps in this petty pace'
p = 'to-morrow and to-morrow '
subseq_ind = SubseqIndex(t, 8, 3)
```

```
In [3]: occurrences, num_index_hits = query_subseq(p, t, subseq_ind)
```

```
In [4]: print(occurrences)

[0, 14]
```

```
In [5]: print(num_index_hits)

6
```

Example 2

```
In [6]: # King John by William Shakespeare
!wget http://www.gutenberg.org/ebooks/1110.txt.utf-8

--2015-07-31 13:59:06--  http://www.gutenberg.org/ebooks/1110.txt.utf-8
Resolving www.gutenberg.org... 152.19.134.47
Connecting to www.gutenberg.org|152.19.134.47|:80... connected.
HTTP request sent, awaiting response... 302 Found
Location: http://www.gutenberg.org/cache/epub/1110/pg1110.txt [following]
--2015-07-31 13:59:07--  http://www.gutenberg.org/cache/epub/1110/pg1110.txt
Reusing existing connection to www.gutenberg.org:80.
HTTP request sent, awaiting response... 200 OK
Length: 145418 (142K) [text/plain]
Saving to: '1110.txt.utf-8.1'

1110.txt.utf-8.1    100%[=====>] 142.01K  --.-KB/s   in 0.08s

2015-07-31 13:59:07 (1.78 MB/s) - '1110.txt.utf-8.1' saved [145418/145418]
```

```
In [7]: t = open('1110.txt.utf-8').read()
p = 'English measure backward'
subseq_ind = SubseqIndex(t, 8, 3)
```

```
In [8]: occurrences, num_index_hits = query_subseq(p, t, subseq_ind)
```

```
In [9]: print(occurrences)

[135249]
```

In [10]: `print(num_index_hits)`

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