

## Contents

### Chuck.txt

```
1 Chuck, a scruffy terrier mix with ears that
2 flopped in perpetually surprised angles,
3 considered the dandelion in the park his
4 nemesis. Every morning, during his walk with
5 his human, Sarah, Chuck would lower his head,
6 a low growl rumbling in his chest, and
7 charge. The dandelion, of course, remained
8 unmoved. Undeterred, Chuck would then try a
9 different tactic: a delicate sniff, followed
10 by a sudden, playful pounce. Sometimes, he'd
11 even attempt to dig it out with enthusiastic,
12 albeit clumsy, paws. Sarah would chuckle,
13 watching his daily battle. One sunny
14 afternoon, a gust of wind finally plucked the
15 dandelion's fluffy head and carried it away.
16 Chuck froze, then looked up at Sarah, a
17 triumphant bark escaping his throat. He had
18 finally won, though the victory was more the
19 wind's than his own.
20 #Terrier #Dandelion
```

## Output

```
1 Starting Text File Indexer
2
3 ===== Text File Indexer Menu =====
4 1. Index a text file
5 2. Show tokens in all sections
6 3. Find tokens by length
7 4. View tokens by section
8 5. Exit
9 =====
10 Enter your choice (1-5): 2
11
12 Index is empty.
13
14 ===== Text File Indexer Menu =====
15 1. Index a text file
16 2. Show tokens in all sections
17 3. Find tokens by length
18 4. View tokens by section
19 5. Exit
20 =====
21 Enter your choice (1-5): 3
22
23 Index is empty.
24
25 ===== Text File Indexer Menu =====
26 1. Index a text file
27 2. Show tokens in all sections
28 3. Find tokens by length
29 4. View tokens by section
30 5. Exit
31 =====
32 Enter your choice (1-5): 4
33
34 Index is empty.
```

## Output Continued ...

```
35
36 ===== Text File Indexer Menu =====
37 1. Index a text file
38 2. Show tokens in all sections
39 3. Find tokens by length
40 4. View tokens by section
41 5. Exit
42 =====
43 Enter your choice (1-5): 1
44 Enter the filename to index: chuck.txt
45 Indexing file: 'chuck.txt'...
46 File indexed successfully (20 lines, 133 tokens processed).
47
48 ===== Text File Indexer Menu =====
49 1. Index a text file
50 2. Show tokens in all sections
51 3. Find tokens by length
52 4. View tokens by section
53 5. Exit
54 =====
55 Enter your choice (1-5): 2
56
57 --- Complete Index ---
58
59 --- Section A ---
60   a: 1, 6, 8, 9, 10, 14, 16
61   afternoon,: 14
62   albeit: 12
63   and: 6, 15
64   angles,: 2
65   at: 16
66   attempt: 11
67   away.: 15
```

## Output Continued ...

```
68
69 --- Section B ---
70   bark: 17
71   battle.: 13
72   by: 10
73
74 --- Section C ---
75   Chuck: 5, 8, 16
76   Chuck,: 1
77   carried: 15
78   charge.: 7
79   chest,: 6
80   chuckle,: 12
81   clumsy,: 12
82   considered: 3
83   course,: 7
84
85 --- Section D ---
86   daily: 13
87   dandelion: 3
88   dandelion's: 15
89   dandelion,: 7
90   delicate: 9
91   different: 9
92   dig: 11
93   during: 4
94
95 --- Section E ---
96   Every: 4
97   ears: 1
98   enthusiastic,: 11
99   escaping: 17
100  even: 11
```

## Output Continued ...

```
101
102 --- Section F ---
103     finally: 14, 18
104     flopped: 2
105     fluffy: 15
106     followed: 9
107     froze,: 16
108
109 --- Section G ---
110     growl: 6
111     gust: 14
112
113 --- Section H ---
114     He: 17
115     had: 17
116     he'd: 10
117     head: 15
118     head,: 5
119     his: 3, 4, 5, 5, 6, 13, 17, 19
120     human,: 5
121
122 --- Section I ---
123     in: 2, 3, 6
124     it: 11, 15
125
126 --- Section L ---
127     looked: 16
128     low: 6
129     lower: 5
130
131 --- Section M ---
132     mix: 1
133     more: 18
134     morning,: 4
```

## Output Continued ...

```
135
136 --- Section N ---
137   nemesis.: 4
138
139 --- Section O ---
140   One: 13
141   of: 7, 14
142   out: 11
143   own.: 19
144
145 --- Section P ---
146   park: 3
147   paws.: 12
148   perpetually: 2
149   playful: 10
150   plucked: 14
151   pounce.: 10
152
153 --- Section R ---
154   remained: 7
155   rumbling: 6
156
157 --- Section S ---
158   Sarah: 12
159   Sarah,: 5, 16
160   Sometimes,: 10
161   scruffy: 1
162   sniff,: 9
163   sudden,: 10
164   sunny: 13
165   surprised: 2
```

## Output Continued ...

```
166
167 --- Section T ---
168   The: 7
169   tactic:: 9
170   terrier: 1
171   than: 19
172   that: 1
173   the: 3, 3, 14, 18, 18
174   then: 8, 16
175   though: 18
176   throat.: 17
177   to: 11
178   triumphant: 17
179   try: 8
180
181 --- Section U ---
182   Undeterred,: 8
183   unmoved.: 8
184   up: 16
185
186 --- Section V ---
187   victory: 18
188
189 --- Section W ---
190   walk: 4
191   was: 18
192   watching: 13
193   wind: 14
194   wind's: 19
195   with: 1, 4, 11
196   won,: 18
197   would: 5, 8, 12
198
199 --- Section Non-Alpha ---
200   #Dandelion: 20
201   #Terrier: 20
202   -----
```

## Output Continued ...

```
203
204 ===== Text File Indexer Menu =====
205 1. Index a text file
206 2. Show tokens in all sections
207 3. Find tokens by length
208 4. View tokens by section
209 5. Exit
210 =====
211 Enter your choice (1-5): 1
212 Index is not empty. Clear existing index? (y/n): y
213 Enter the filename to index: nonexistent_file.txt
214 Error: Could not open file 'nonexistent_file.txt'.
215
216 ===== Text File Indexer Menu =====
217 1. Index a text file
218 2. Show tokens in all sections
219 3. Find tokens by length
220 4. View tokens by section
221 5. Exit
222 =====
223 Enter your choice (1-5): 4
224 Enter section character (A-Z or *): v
225
226 --- Section V ---
227     victory: 18
228 -----
229
230 ===== Text File Indexer Menu =====
231 1. Index a text file
232 2. Show tokens in all sections
233 3. Find tokens by length
234 4. View tokens by section
235 5. Exit
236 =====
237 Enter your choice (1-5): 1
238 Index is not empty. Clear existing index? (y/n): n
239 Indexing cancelled.
```



## Output Continued ...

```
240
241 ===== Text File Indexer Menu =====
242 1. Index a text file
243 2. Show tokens in all sections
244 3. Find tokens by length
245 4. View tokens by section
246 5. Exit
247 =====
248 Enter your choice (1-5): 4
249 Enter section character (A-Z or *): v
250
251 --- Section V ---
252     victory: 18
253 -----
254
255 ===== Text File Indexer Menu =====
256 1. Index a text file
257 2. Show tokens in all sections
258 3. Find tokens by length
259 4. View tokens by section
260 5. Exit
261 =====
262 Enter your choice (1-5): 3
263 Enter token length (non-negative): 2
264
265 --- Tokens of Length 2 ---
266     at: 16
267     by: 10
268     He: 17
269     in: 2, 3, 6
270     it: 11, 15
271     of: 7, 14
272     to: 11
273     up: 16
274 -----
```

## Output Continued ...

```
275
276 ===== Text File Indexer Menu =====
277 1. Index a text file
278 2. Show tokens in all sections
279 3. Find tokens by length
280 4. View tokens by section
281 5. Exit
282 =====
283 Enter your choice (1-5): 1
284 Index is not empty. Clear existing index? (y/n): n
285 Indexing cancelled.
286
287 ===== Text File Indexer Menu =====
288 1. Index a text file
289 2. Show tokens in all sections
290 3. Find tokens by length
291 4. View tokens by section
292 5. Exit
293 =====
294 Enter your choice (1-5): 3
295 Enter token length (non-negative): 11
296
297 --- Tokens of Length 11 ---
298   dandelion's: 15
299   perpetually: 2
300   Undeterred,: 8
301 -----
302
303 ===== Text File Indexer Menu =====
304 1. Index a text file
305 2. Show tokens in all sections
306 3. Find tokens by length
307 4. View tokens by section
308 5. Exit
309 =====
310 Enter your choice (1-5): 1
```

### Output Continued ...

```
311 Index is not empty. Clear existing index? (y/n): y
312 Enter the filename to index: milo.txt
313 Existing index cleared.
314 Indexing file: 'milo.txt'...
315 File indexed successfully (9 lines, 72 tokens processed).
```

### milo.txt

```
1 In a quiet forest, a tiny squirrel named Milo loved
2 to collect shiny acorns. One day, he found a golden
3 acorn near a sparkling stream. Curious, he followed
4 a trail of glowing pebbles that led him to a hidden
5 grove. There, he met a wise old owl who shared
6 stories of the forest's magic. Milo returned home,
7 feeling grateful for the adventure and the new
8 friend he had made.
9 #Milo #squirrel #acorn
```

### Output Continued ...

```
316
317 ===== Text File Indexer Menu =====
318 1. Index a text file
319 2. Show tokens in all sections
320 3. Find tokens by length
321 4. View tokens by section
322 5. Exit
323 =====
324 Enter your choice (1-5): 2
```

## Output Continued ...

```
325
326 --- Complete Index ---
327
328 --- Section A ---
329   a: 1, 1, 2, 3, 4, 4, 5
330   acorn: 3
331   acorns.: 2
332   adventure: 7
333   and: 7
334
335 --- Section C ---
336   Curious,: 3
337   collect: 2
338
339 --- Section D ---
340   day,: 2
341
342 --- Section F ---
343   feeling: 7
344   followed: 3
345   for: 7
346   forest's: 6
347   forest,: 1
348   found: 2
349   friend: 8
350
351 --- Section G ---
352   glowing: 4
353   golden: 2
354   grateful: 7
355   grove.: 5
```

## Output Continued ...

```
356
357 --- Section H ---
358     had: 8
359     he: 2, 3, 5, 8
360     hidden: 4
361     him: 4
362     home,: 6
363
364 --- Section I ---
365     In: 1
366
367 --- Section L ---
368     led: 4
369     loved: 1
370
371 --- Section M ---
372     Milo: 1, 6
373     made.: 8
374     magic.: 6
375     met: 5
376
377 --- Section N ---
378     named: 1
379     near: 3
380     new: 7
381
382 --- Section O ---
383     One: 2
384     of: 4, 6
385     old: 5
386     owl: 5
387
388 --- Section P ---
389     pebbles: 4
390
391 --- Section Q ---
392     quiet: 1
```

## Output Continued ...

```
393
394 --- Section R ---
395     returned: 6
396
397 --- Section S ---
398     shared: 5
399     shiny: 2
400     sparkling: 3
401     squirrel: 1
402     stories: 6
403     stream.: 3
404
405 --- Section T ---
406     There,: 5
407     that: 4
408     the: 6, 7, 7
409     tiny: 1
410     to: 2, 4
411     trail: 4
412
413 --- Section W ---
414     who: 5
415     wise: 5
416
417 --- Section Non-Alpha ---
418     #Milo: 9
419     #acorn: 9
420     #squirrel: 9
421     -----
```

## Output Continued ...

```
422
423 ===== Text File Indexer Menu =====
424 1. Index a text file
425 2. Show tokens in all sections
426 3. Find tokens by length
427 4. View tokens by section
428 5. Exit
429 =====
430 Enter your choice (1-5): 3
431 Enter token length (non-negative): 1
432
433 --- Tokens of Length 1 ---
434   a: 1, 1, 2, 3, 4, 4, 5
435 -----
436
437 ===== Text File Indexer Menu =====
438 1. Index a text file
439 2. Show tokens in all sections
440 3. Find tokens by length
441 4. View tokens by section
442 5. Exit
443 =====
444 Enter your choice (1-5): 3
445 Enter token length (non-negative): 2
446
447 --- Tokens of Length 2 ---
448   he: 2, 3, 5, 8
449   In: 1
450   of: 4, 6
451   to: 2, 4
452 -----
453
```

## Output Continued ...

```
454 ===== Text File Indexer Menu =====
455 1. Index a text file
456 2. Show tokens in all sections
457 3. Find tokens by length
458 4. View tokens by section
459 5. Exit
460 =====
461 Enter your choice (1-5): 4
462 Enter section character (A-Z or *): m
463
464 --- Section M ---
465     Milo: 1, 6
466     made.: 8
467     magic.: 6
468     met: 5
469 -----
470
471 ===== Text File Indexer Menu =====
472 1. Index a text file
473 2. Show tokens in all sections
474 3. Find tokens by length
475 4. View tokens by section
476 5. Exit
477 =====
478 Enter your choice (1-5): 4
479 Enter section character (A-Z or *): t
480
481 --- Section T ---
482     There,: 5
483     that: 4
484     the: 6, 7, 7
485     tiny: 1
486     to: 2, 4
487     trail: 4
488 -----
```



## Output Continued ...

```
489
490 ===== Text File Indexer Menu =====
491 1. Index a text file
492 2. Show tokens in all sections
493 3. Find tokens by length
494 4. View tokens by section
495 5. Exit
496 =====
497 Enter your choice (1-5): 5
498
499 Exiting program. Goodbye!
500 Program finished.
```