

```
1  /*
2  ****
3  *                               countSentences
4  ****
5  Command format:
6
7          countSentences <input.txt> <output.txt>
8
9  Counts the number of sentences between 2 full stops.
10
11  When a '.' is found, the next character is checked and if this is an empty space
12  (blank, new line, or tab) and that's considered the end of a sentence. Same if
13  EOF follows the '.'.
14  In the case of a file with no text, a message is printed in the output file.
15
16  N.B. i is initialized to 1 to properly count sentences.
17  N.B. Everything is done inside main because the task is very simple.
18  */
19
20
21  # include <stdio.h>
22  # include <ctype.h>
23
24  # define MAX 1000
25
26
27
28  int main (int argc, char * argv[]) {
29      if (argc != 3) {
30          printf ("\n Incorrect Command!\n");
31          return 0;
32      }
33
34      FILE * fin, * fout;
35      int c;
36
37      fin = fopen (*(argv + 1), "r");
38      fout = fopen (*(argv + 2), "w");
39
40      /* Skip every initial non-alphanumeric character */
41      while ( !isalnum( (c = getc(fin)) ))
42          ;
43
44      if (c == EOF) {
45          fprintf (fout , "<%=s> is empty.\n" , *(argv + 1));
46          printf("\nResult in %s" , *(argv + 2));
47          return 0;
48      }
49
50      int i = 0;
51
52      while ((c = getc(fin)) != EOF) {
53          if (c == '.')
54              if ( isspace( (c = getc(fin)) ) || c == EOF )
55                  i++;
56      }
57
58
```

```
59
60     fprintf (fout, "Number of sentences: %d\n" , i);
61     printf("\nResults in %s\n" , *(argv + 2));
62
63     fclose (fin);
64     fclose (fout);
65 }
```