

Every following tasks need to write complete code, not exactly system design, like homework.

Print a book

Design and implement a printer algorithm, the input will be a very large text, you need to print the text as a book. The text may contains blank, tab (take 4 positions), new-line and other printable words.

hint:

1. The text may have ^{任意的}arbitrary format, for example: many leading blanks, tabs or newlines, many trailing blanks, tabs or newlines, and many blanks, tabs or newlines between words
2. Can't split a single word into different lines, you can assume a single word length will not exceeds the book's width (word length ≤ 100) ^{单词长度不会超多书的宽 100, 单词不能断}
3. At the beginning of a line, ignore all the blanks, tabs and newlines. So the beginning of a line should always be some word ^{一行开始忽略空格 tab newline, 总是word开头}
4. At the end of a line, also ignore all the blanks, tabs and newlines. So the end of a line should always be some word, you can't print trailing blanks or tabs at the end of a line, except 1 new-line ^{结束也忽略, 除了一个新行}
5. According to rule 3 and rule 4, you will expect not to print consecutive newlines ^{除了一个回车}
6. On the same line, you should print all the blanks and tabs between 2 words ^{同一行, 空格, tab 打印}
7. The book should support different sizes, for example: A3 paper (297mm * 420mm) or A4 paper (210mm * 297mm), and you can suppose the character size is 2mm * 3mm ^{支持不同的规格}
8. Print a line of "=====" (length is equal to the page width) to start a new page