671. Rotate Words

* [Description](http://lintcode.com/en/problem/rotate-words/" \l "description)
* [Notes](http://lintcode.com/en/problem/rotate-words/#note)
* [Testcase](http://lintcode.com/en/problem/rotate-words/#testcase)
* [Judge](http://lintcode.com/en/problem/rotate-words/#judge)

The words are same rotate words if rotate the word to the right by loop, and get another. Count how many different rotate word sets in dictionary.

E.g. picture and turepic are same rotate words.

 Notice

All words are lowercase.

Have you met this question in a real interview?

Yes

**Example**

Given dict = ["picture", "turepic", "icturep", "word", "ordw", "lint"]  
return 3.

"picture", "turepic", "icturep"are same ratote words.  
"word", "ordw" are same too.  
"lint" is the third word that different from the previous two words.

<http://lintcode.com/en/problem/rotate-words/#>

1. */\**
2. *\* To change this license header, choose License Headers in Project Properties.*
3. *\* To change this template file, choose Tools | Templates*
4. *\* and open the template in the editor.*
5. *\*/*
6. **package** javaapplication2;
8. **import** java.util.ArrayList;
9. **import** java.util.Arrays;
10. **import** java.util.HashSet;
11. **import** java.util.List;
12. **import** java.util.SortedSet;
13. **import** java.util.TreeSet;
15. ***/\*\****
16. ***\****
17. ***\* @author Usuario***
18. ***\*/***
19. **public** **class** JavaApplication2 {
21. **public** **static** String obtenerMenor(String s)
22. {
23. String concat = s + s;
24. SortedSet<String> sortedSet =
25. **new** TreeSet();
26. **for** (**int** i = 0; i < concat.length() - s.length() + 1; i++)
27. {
28. sortedSet.add(concat.substring(i,i+ s.length()));
29. }
31. *//Collections.addAll(messageCollection, array);*
32. *//return sortedSet.ToArray()[0];*
33. **return** sortedSet.first();
34. }
36. **public** **static** **int** countRotateWords(List<String> words)
37. {
38. *// Write your code here*
39. HashSet<String> hs =
40. **new** HashSet();
42. **for**(**int** i =0; i<words.size(); i++)
43. {
44. hs.add(obtenerMenor(words.get(i)));
45. }
46. **return** hs.size();
47. }
48. **public** **static** **void** main(String[] args) {
49. *// TODO code application logic here*
50. *//String s = "tureaaapic";*
51. *//System.out.println( obtenerRotada(s));*
52. *// String[] dict = {"abba", "bbaa", "baab", "aabb", "abba"};*
53. *//String[] dict = { "aaaabaaabaabab", "aababaaaabaaab" };*
54. String[] dict = {"baaabaaabb","aaabaaabbb"};
55. *//String[] dict = {"picture", "turepic", "icturep", "word", "ordw", "lint"};*
56. *//String[] dict = {"ricky","grind","cubic","panic","lover"};*
57. *//String [] dict = {"aaa","a", "aa","aa","aaa"};*
58. *//String[] dict = {"        ","",""};*
59. *//String[] dict = { "abbabbb", "bbabbab","bbabb" };*
61. List<String> lista = **new** ArrayList();
62. lista.addAll(Arrays.asList(dict));
64. System.out.println( countRotateWords(lista));
65. }
67. }