

```

1  // Deterministic factor for wordle starter accuracy:
2  // Does it include all most commonly used characters for its size?
3
4  import java.util.Scanner;
5
6  public class wordleStartChecker {
7      static char[] list = {'e', 'a', 'r', 'i', 'o', 't', 'n', 's', 'l', 'c',
8          'u', 'd', 'p', 'm', 'h', 'g', 'b', 'f', 'y', 'w', 'k', 'v', 'x', 'z', 'j', 'q'};
9      static double[] freq = {56.88, 43.31, 38.64, 38.45, 36.51, 35.43, 33.92, 29.23,
10         27.98, 23.13, 18.51, 17.25, 16.14, 15.36, 15.31, 12.59, 10.56, 9.24, 9.06,
11         6.57, 5.61, 5.13, 1.48, 1.39, 1, 1};
12     static int ntries;
13
14     public static void main(String[] args) {
15         Scanner sc = new Scanner(System.in);
16         System.out.println("How many test 5-letter words do you want?");
17         ntries = sc.nextInt();
18         String word = "";
19         for (int i = 1; i <= ntries; i++) {
20             word += sc.next().trim();
21         }
22         compareWord(word.toLowerCase());
23         sc.close();
24     }
25
26     static void compareWord(String word) {
27         int length = word.length();
28         // Create word with the highest accuracy for given length
29         String check = "";
30         int checkPercent = 0;
31         for (int i = 0; i < length; i++) {
32             check += list[i];
33             checkPercent += freq[i];
34         }
35         // Check if word and check contains the same letters
36         int flag = 0, wordPercent = 0;
37         for (int i = 0; i < length; i++) {
38             if (check.contains("" + word.charAt(i))) {
39                 flag += 1;
40             }
41             wordPercent += freq[findIndex(word.charAt(i))];
42         }
43         System.out.println(word + "\n" + check);
44         if (flag == length) System.out.println("Your word(s) is an ideal wordle starter");
45         if (flag < length) {
46             double percent = (wordPercent * 100.0) / checkPercent;
47             System.out.println("Your word isn't the ideal wordle starter. It is " +
48                 Math.round((percent / ntries) * Math.pow(10, 2)) / Math.pow(10, 2) + "% of an ideal world");
49         }
50     }
51
52     static int findIndex(char ch) {
53         for (int i = 0; i < 26; i++) {
54             if (list[i] == ch) return i;
55         }
56         return 0;
57     }
58 }
59

```