

personal-website/programming-exam/exam02/exam02.php

```
1 <?php
2 // Read the file and store the words in an array
3 $words = file('words.txt', FILE_IGNORE_NEW_LINES | FILE_SKIP_EMPTY_LINES);
4
5 // Initialize the array to store the words by the number of vowels
6 $vowelCounts = [];
7
8 // Define the vowels that will be used to check the words
9 $vowels = ['a', 'e', 'i', 'o', 'u'];
10
11 // Go over each word and count the vowels
12 foreach ($words as $word) {
13
14     // Initialize the count of vowels for the current word
15     $count = 0;
16
17     // Convert the word to lowercase
18     $currentWord = strtolower($word);
19
20     // Go over each character in the word and check if it is a vowel
21     foreach (str_split($currentWord) as $char) {
22
23         // If the character is a vowel, increment the count
24         if (in_array($char, $vowels)) {
25             $count++;
26         }
27     }
28
29     // Store the word in the array based on the number of vowels
30     $vowelCounts[$count][] = $word;
31 }
32
33 // Sort the array by the number of vowels (Found on w3schools)
34 ksort($vowelCounts);
35
36 // Output the array as JSON
37 header('Content-Type: application/json');
38 echo json_encode($vowelCounts);
39 ?>
40
41
42
```