Write a program that finds the number of vowels (‘a’, ‘e’, ‘o’, ‘i’, ‘u’) in a command line argument list. Use a **separate thread** to do the count for each command line argument. Thus if you have 5 command line arguments, you should spawn 5 threads. Once all threads have finished their work, you should print the total number of vowels found.

Example program runs:

```
java VowelCounter Hello Hello see you in Italy in Venice
Number of vowels: 15
```

Once you have the above working, add an additional complication. Let’s imagine that we will be reading the words in from a file and there will be **many** words. Modify your program so that we will store the result for each word that is processed. If a word is encountered a second time, a new Thread will **not** be spawned. Instead, simply **lookup** the previous result and add it into your summation. To check whether this is working correctly or not, print the number of Threads that you generated. In the example below, only 6 threads should be created because the words **Hello** and **in** can simply be looked up. Remember to prevent races from occurring.

```
java VowelCounter Hello Hello see you in Italy in Venice
Number of vowels: 15
Number of threads created: 6
```