Write a binary search application

Write a Java application that:

1. Reads in a list of 100-200 words from a file. (Find one online.)
2. Sorts the list using any algorithm and stores the sorted words in an array
3. Lets the user type in any search word.
4. Uses binary search to search for the word in the sorted array.
5. Prints either “Your word is item number \_\_\_ in my dictionary,” or “Sorry, your word is not in my dictionary.”
6. Lets the user do this repeatedly until he or she types “Q”.

For step 2, code any of the four sorting algorithms we have learned. See if you can code the sorting method from memory, or by reconstructing it. If you absolutely have to, peek at one of our earlier Java programs.

Code step 4 as a separate method. Test it on a small, hand-typed array of sorted words before trying it in the main program.