GetAhead - Interview Practice 6

Car Plates Vocabulary

We need to find the shortest word from a vocabulary that includes **all** the letters from a given licence plate. The shorter the word, the better. The licence plates start with two or three letters, then they are followed by 5 characters, from which at most 2 are letters, the rest are digits.

Write a solution that will find the shortest words for 1000 licence plates.

You are given a vocabulary containing all valid words.

- Keep duplicate letters
- Ordering is irrelevant
- Case is irrelevant
- The vocabulary is sorted lexicographically
- The vocabulary contains about 4 million entries

Example:

For the licence plate RT 123SO the shortest word would be SORT:

for RC 10014 the shortest word would be CAR.