Most phone dialpads have letters written on them where the letter/number mapping is defined according to the International Telecommunication Unions Standards. This allows businesses to have a vanity phone number that is easy for their clients to remember such as:
1-800-PAINTER (1-800-724-6837)

(Instead of letters you dial the number that has the corresponding letter on it, so for example:
Instead of A, B or C -> you would dial 2
Instead of G, H or I -> you would dial 4)

You will write a program that will help businesses pick a phone number that they can use as a vanity phone number. You can use any programming language of your choice as long as it can be run from the shell and can read in plain text files.

Your program will take:
- A number input
- A dictionary that is a plain text file of words separated by new lines, a sample dictionary is provided.

Your program will return:
- All possible words that can be made with that phone number combination from the dictionary file.

Examples:
- ./program dictionary 228 -> act bat cat
- ./program dictionary (762)-5387 -> pockets rockets sockets
- ./program dictionary letters ->
- ./program dictionary (2)-2-8 -> act bat cat

Take 60 minutes to work on this question and send us whatever you have at that point (a partial solution is better than no solution at all!). We will have a short follow up call right after to go through your code and approach.

Any questions? Dont hesitate to send them to us, dont let them hold you up