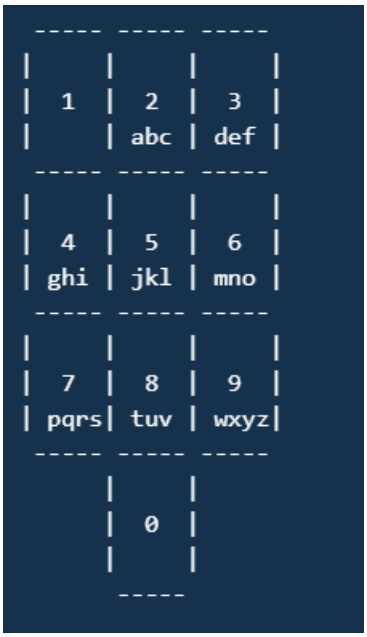
Topic - Recursion

Medium – Difficulty: Phone Number Mnemonics
If you open the keypad of your mobile phone, it'll likely look like this:



Almost every digit is associated with some letters in the alphabet; this allows certain phone numbers to spell out actual words. For example, the phone number 8464747328 can be written as timisgreat ; similarly, the phone number 2686463 can be written as antoine or as ant6463.

It's important to note that a phone number doesn't represent a single sequence of letters, but rather multiple combinations of letters. For instance, the digit 2 can represent three different letters (a, b, and c).

A mnemonic is defined as a pattern of letters, ideas, or associations that assist in remembering something. Companies oftentimes use a mnemonic for their phone number to make it easier to remember.

Given a stringified phone number of any non-zero length, write a function that returns all mnemonics for this phone number, in any order.

For this problem, a valid mnemonic may only contain letters and the digits 0 and 1. In other words, if a digit is able to be represented by a letter, then it must be. Digits 0 and 1 are the only two digits that don't have letter representations on the keypad.

Note that you should rely on the keypad illustrated above for digit-letter associations.

Sample Input

```
phoneNumber = "1905"
```

Sample Output

```
[
  "1w0j",
  "1w0k",
  "1w0l",
  "1x0j",
  "1x0k",
  "1x0l",
  "1y0j",
  "1y0k",
  "1y0l",
  "1z0j",
  "1z0k",
  "1z0l",
]
// The mnemonics could be ordered differently.
```