OldPhone exercise

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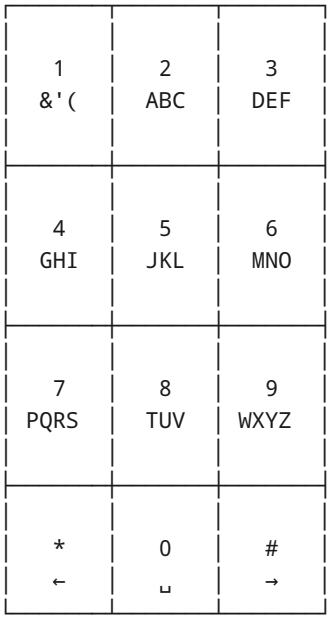

Here is an old phone keypad with alphabetical letters, a backspace key, and a send button.

Each button has a number to identify it and pressing a button multiple times will cycle through the letters on it allowing each button to represent more than one letter.

For example, pressing 2 once will return ‘A’ but pressing twice in succession will return ‘B’.

You must pause for a second in order to type two characters from the same button after each other: “222 2 22” → “CAB”.

The Directions

MD

```
Please design and document a class of method that will turn any input to (1)
OldPhonePad into the correct output.
Assume that a send # will always be included at the end of every input.
```

1. Is the "class of method" supposed to read "class or method"?

This word, I think should be "or" instead, and I have applied this assumption before I have asked for confirmation.

```
public static String OldPhonePad (string input) {
// Please write your implementation here!
}
```

Input - Output table

Examples:

```
OldPhonePad(“33#”) => output: E
//add more simple here
OldPhonePad(“227*#”) => output: B
OldPhonePad(“4433555 555666#”) => output: HELLO
OldPhonePad(“443355 55666#”) => output: HEKKO
OldPhonePad(“8 88777444666*664#”) => output: ?????
```

CSHARP

Pseudo code

option 1:

Given a string go through that string and check matches that correspond to an array of hashes holding particular values

constant_number_attributions= [{2:a},{22:b},{222:c}...]

option 2:

constant_number_attributions= [[a,b,c], [d, e, f], [g, h, i]]

Look at string, split it into an array, then on each element in the array check to see if that matches any of the elements in the constant_number_attributions

option 3: regex matching

option 4: counting

Our keyboard with these values

sequence letter	sequence letter	sequence letter
1 &	11 '	111 (
2 a	22 b	222 c
3 d	33 e	333 f
4 g	44 h	444 i
5 j	55 k	555 l
6 m	66 n	666 o
7 p	77 q	777 r 7777 s
8 t	88 u	888 v
9 w	99 x	999 y 9999 z

Ideas

How to get to the numbers

11 → "&" 12 → "'" 22 → "(" 32 → "c" 13 → "d" 23 → "e" 33 → "f" 14 → 24 → 34 → 15 → 25 → 35 → 16 → 26 → 36 →

It’s better to have the numbers, represented as strings because we might want to change the value of certain numbers later on, if we need to expand out (i.e have 0 or 000 refer to a symbol or).

string.scan(/0+|1+|2+|3+|4+|5+|6+|7+|8+|9+/)

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