***The License Plate Problem*** *(45 minutes, aprox)*

You work for the DMV; you have a specific, sequential way of generating new license plate numbers:

Each license plate number has 6 alphanumeric characters. The numbers always come before the letters.

The first plate number is 000000, followed by 000001. Finally, when you arrive at 999999, the next entry would be 00000A, Followed by 00001A. When you arrive at 99999A, the next entry is 00000B. After following the pattern to 99999Z, the next in the sequence would be 0000AA.

When 9999AA is reached, the next in the series would be 0000AB...

The pattern overview looks a bit like the following:

000000

000001

...

999999

00000A

00001A

...

99999A

00000B

00001B

...

99999Z

0000AA

0001AA

...

9999AA

0000AB

0001AB

...

9999ZZ

000AAA

001AAA

...

ZZZZZZ

The goal is to write a function that takes some index n as a parameter and returns the nth element in this license plate sequence.