1332. Count Vowels Permutation

Difficulty : Hard

https://leetcode.com/problems/count-vowels-permutation

Given an integer `n`, your task is to count how many strings of length `n` can be formed under the following rules:

- Each character is a lower case vowel (`'a'`, `'e'`, `'i'`, `'o'`, `'u'`)
- Each vowel `'a'` may only be followed by an `'e'`.
- Each vowel `'e'` may only be followed by an `'a'` or an `'i'`.
- Each vowel `'i'` **may not** be followed by another `'i'`.
- Each vowel `'o'` may only be followed by an `'i'` or a `'u'`.
- Each vowel `'u'` may only be followed by an `'a'`.

Since the answer may be too large, return it modulo `10^9 + 7`.

Example 1:

```
Input: n = 1
Output: 5
Explanation: All possible strings are: "a", "e", "i" , "o" and "u".
```

Example 2:

```
Input: n = 2
Output: 10
Explanation: All possible strings are: "ae", "ea", "ei", "ia", "ie", "io", "iu", "oi", "ou" and "ua".
```

Example 3:

```
Input: n = 5
Output: 68
```

Constraints:

- `1 <= n <= 2 * 10^4`