

# 1761. Count Sorted Vowel Strings

## Difficulty : Medium

<https://leetcode.com/problems/count-sorted-vowel-strings>

Given an integer  $n$ , return *the number of strings of length  $n$  that consist only of vowels (a, e, i, o, u) and are **lexicographically sorted***.

A string  $s$  is **lexicographically sorted** if for all valid  $i$ ,  $s[i]$  is the same as or comes before  $s[i+1]$  in the alphabet.

### Example 1:

**Input:**  $n = 1$

**Output:** 5

**Explanation:** The 5 sorted strings that consist of vowels only are `["a","e","i","o","u"]`.

### Example 2:

**Input:**  $n = 2$

**Output:** 15

**Explanation:** The 15 sorted strings that consist of vowels only are

`["aa","ae","ai","ao","au","ee","ei","eo","eu","ii","io","iu","oo","ou","uu"]`.

Note that "ea" is not a valid string since 'e' comes after 'a' in the alphabet.

### Example 3:

**Input:**  $n = 33$

**Output:** 66045

### Constraints:

- $1 \leq n \leq 50$