

## D. Lucky Pair

time limit per test: 2 seconds  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

Petya loves lucky numbers very much. Everybody knows that lucky numbers are positive integers whose decimal record contains only the lucky digits **4** and **7**. For example, numbers **47**, **744**, **4** are lucky and **5**, **17**, **467** are not.

Petya has an array  $a$  of  $n$  integers. The numbers in the array are numbered starting from 1. Unfortunately, Petya has been misbehaving and so, his parents don't allow him play with arrays that have many lucky numbers. It is guaranteed that no more than 1000 elements in the array  $a$  are lucky numbers.

Petya needs to find the number of pairs of non-intersecting segments  $[l_1; r_1]$  and  $[l_2; r_2]$  ( $1 \leq l_1 \leq r_1 < l_2 \leq r_2 \leq n$ , all four numbers are integers) such that there's no such lucky number that occurs simultaneously in the subarray  $a[l_1..r_1]$  and in the subarray  $a[l_2..r_2]$ . Help Petya count the number of such pairs.

### Input

The first line contains an integer  $n$  ( $2 \leq n \leq 10^5$ ) — the size of the array  $a$ . The second line contains  $n$  space-separated integers  $a_i$  ( $1 \leq a_i \leq 10^9$ ) — array  $a$ . It is guaranteed that no more than 1000 elements in the array  $a$  are lucky numbers.

### Output

On the single line print the only number — the answer to the problem.

Please do not use the `%lld` specifier to read or write 64-bit integers in C++. It is preferred to use the `cin`, `cout` streams or the `%I64d` specifier.

### Examples

input
4 1 4 2 4
output
9

input
2 4 7
output
1

input
4 4 4 7 7
output
9

### Note

The subarray  $a[l..r]$  is an array that consists of elements  $a_l, a_{l+1}, \dots, a_r$ .

In the first sample there are 9 possible pairs that satisfy the condition:  $[1, 1]$  and  $[2, 2]$ ,  $[1, 1]$  and  $[2, 3]$ ,  $[1, 1]$  and  $[2, 4]$ ,  $[1, 1]$  and  $[3, 3]$ ,  $[1, 1]$  and  $[3, 4]$ ,  $[1, 1]$  and  $[4, 4]$ ,  $[1, 2]$  and  $[3, 3]$ ,  $[2, 2]$  and  $[3, 3]$ ,  $[3, 3]$  and  $[4, 4]$ .

In the second sample there is only one pair of segments —  $[1;1]$  and  $[2;2]$  and it satisfies the condition.