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The Virtual Learning Environment for Computer Programming

## P0006. Fantastic numbers

P79534_en
A natural number is called fantastic if all the digits in the even positions are even and all the digits in the odd positions are odd (the positions start to count from 1 on the right). For instance, 58361 and 6909 are fantastic, while 1212421 is not it (because the third digit is a 4 , which is not odd).

Your task is to write a program that reads a sequence of natural numbers, prints how many there are, and also prints how many triplets of consecutive fantastic elements there are.
Your program must include and use
bool is_fantastic (int $x$ );
that indicates if a natural number x is fantastic or it is not.

## Input

The input is a sequence of natural numbers $x_{1}, \ldots, x_{n}$ amb $n \geq 0$.

## Output

Your program must print two lines following the format of the instances: a line with the number $n$ of natural numbers read, and the other one with the number of indices $i$ with $\leq$ and $\leq n-2$ such that $x_{i}, x_{i+1}$ and $x_{i+2}$ are fantastic.

| Sample input 1 |  |
| :--- | :--- | :--- |
| 85836169097101011212421214319000 | Sample output 1 <br> fantastic numbers: 10 <br> fantastic triplets: 3 |

## Sample input 2

## Sample output 2

fantastic numbers: 7
fantastic triplets: 1

## Sample output 3

fantastic numbers: 1
fantastic triplets: 0

## Problem information

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