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 $x_1, \dots, x_n$ 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

```
8 58361 6909 7 10101 1212421 21 43 1 9009
```

Sample output 1

```
fantastic numbers: 10
fantastic triplets: 3
```

Sample input 2

```
13 24 45 3 321 0 901
```

Sample output 2

```
fantastic numbers: 7
fantastic triplets: 1
```

Sample input 3

```
456789
```

Sample output 3

```
fantastic numbers: 1
fantastic triplets: 0
```

Problem information

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