3129 - Mysterious Number

Description

Alice had a bag where each number from 1 to N was present in it. After a magic trick she either removes all even numbers or all odd numbers from the bag. Given the kind of trick she has performed find the Pth smallest number in the bag after the trick. For example P = 1 denotes the smallest number present.

Input specification

First line contains $1 \le T \le 100$, the number of test cases. Each test case consists of $1 \le N \le 10^3$, a string S and an integer P >= 1 in single line. S will be either "odd" or "even" (quotes for clarity), denoting the kind of trick Alice has performed. Note: It is guaranteed that P will be less than or equal to remaining items in the bag.

Output specification

For each test case, print the required answer in one line.

Sample input

2

4 odd 2

5 even 2

Sample output

4

3

Hint(s)

Example 1.

After performing the "odd" trick the numbers 1 and 3 get removed from the bag.

Numbers 2 and 4 are left in the bag.

2nd smallest number is 4 now.

Source [José Nolberto Isac González]

Added by jcfernandez