Problem G

Golf Score

Golf is a club-and-ball sport in which players use various clubs to hit balls into a series of holes on a course in as few strokes as possible.

Unlike most ball games, golf cannot and does not utilize a standardized playing area, and coping with the varied terrains encountered on different courses is a key part of the game. The game at the usual level is played on a course with an arranged progression of 18 holes.

A hole is classified by its par, which gives an indication of the number of strokes a skilled golfer may be expected to need to complete play of the hole.

The goal is to play as few strokes per round as possible. A golfer's number of strokes in a hole, course, or tournament is compared to its respective par score, and is then reported either as the number that the golfer was "under" or "over" par, or if it was "equal to par". Common scores for a hole also have specific terms:

Term	Description
Hole in one	Exactly one stroke
Condor	Four strokes under par
Albatross	Three strokes under par
Eagle	Two strokes under par
Birdie	One stroke under par
Par	Exactly par
Bogey	One stroke over par
Double bogey	Two strokes over par
Triple bogey	Three strokes over par

The most prestigious golf course in the city has hired you to build a golf course management system, one of the most important features in this system is to calculate the total number of strokes a player did in a round given the term that describes the player performance on each of the 18 holes in the course. Write a program that given the par for each hole and the term that describes the player performance on each hole return the total number of strokes the player performed in the round.

Input

The input contains exactly 19 lines. The first line of input contains 18 integer numbers separated by a space where the i-th number represents the par for the i-th hole in the course. Each of the following 18 lines contains a lowercase string describing the performance of the player in that hole (from the table above). It is guaranteed that the par for a hole does not exceeds 5.

Output

Output a line containing a single integer number representing the number of strokes the player performed in the round.

Input example 1	Output example 1
1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 4 4	45
par	
triple bogey	
double bogey	
bogey	
par	
birdie	
eagle	
albatross	
hole in one	