**World Chess Championship**

The World Chess Championship 2022 is about to start. 14 Classical games will be played between Chef and Carlsen in the championship, where each game has one of three outcomes — it can be won by Carlsen, won by Chef, or it can be a draw. The winner of a game gets 2 points, and the loser gets 0 points. If it’s a draw, both players get 1 point each.

The total prize pool of the championship is 100⋅*X*. At end of the 14 Classical games, if one player has **strictly more** points than the other, he is declared the champion and gets 60⋅*X* as his prize money, and the loser gets 40⋅*X*.

If the total points are **tied**, then the defending champion Carlsen is declared the winner. However, if this happens, the winner gets only 55⋅*X*, and the loser gets 45⋅*X*.

Given the results of all the 14 games, output the prize money that Carlsen receives.

The results are given as a string of length 14 consisting of the characters C, N, and D.

* C denotes a victory by Carlsen.
* N denotes a victory by Chef.
* D denotes a draw.

**Input Format**

* The first line of input contains an integer *T*, denoting the number of test cases. The description of *T* test cases follows.
* The first line of each test case contains one integer *X*, denoting that the total prize pool is 100⋅*X*.
* The second line contains the results of the match, as a string of length 14 containing only the characters C, N, and D.

**Output Format**

For each test case, output in a single line the total prize money won by Carlsen.

**Constraints**

* 1≤*T*≤1000
* 1≤*X*≤10^6
* ∣*S*∣=14
* *S* contains only characters D, C, N.

**Subtasks**

**Subtask #1 (100 points):** Original constraints

**Sample 1:**

Input

4

100

CCCCCCCCCCCCCC

400

CDCDCDCDCDCDCD

30

DDCCNNDDDCCNND

1

NNDNNDDDNNDNDN

Output

6000

24000

1650

40

**Explanation:**

**Test case 1:** Since Carlsen won all the games, he will be crowned the champion and will get 60⋅*X* as the prize money which is 60⋅100=6000

**Test case 2:** Carlsen won 7 games and drew 7, so his score is 2⋅7+1⋅7=21. Chef lost 7 games and drew 7, so his score is 0⋅7+1⋅7=7. Since Carlsen has more points, he will be crowned the champion and will get 60⋅*X* as the prize money which is 60⋅400=24000

**Test case 3:** Carlsen and Chef both end up with 14 points. So, Carlsen is declared the winner, but because the points were tied, he receives 55⋅*X*=55⋅30=1650 in prize money.