# Problem 2 – Magic Card

Sashko loves to play card games. He even invented his own game. The game uses a **standard deck of 52 cards**. The card faces are: **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **J**, **Q**, **K** and **A**. The cards suits are denoted by the letters **S** (spades), **H** (hearts), **D** (diamonds) and **C** (clubs). The player is given a hand of cards, a string (“**odd**” or “**even**”), and a **magic card**. You need to **count the sum of all cards at odd or even positions (positions start from 0)**. Card **values** are the following: 2 -> 20, 3 -> 30, 4 -> 40, 5 -> 50, 6 -> 60, 7 -> 70, 8 -> 80, 9 -> 90, 10 -> 100, J -> 120, Q -> 130, K -> 140, A -> 150. When a card’s suit is the same as the suit of the magic card its value is **doubled**. When a card’s face is the same as the face of the magic card its value is **tripled**. The input hand **will not contain** the magic card.

For example, if Sashko gets the hand "**2C 2D 2H AS 10H 10C 2S 3S 5D KD**", the string “**odd**” and a magic card “**AD**”. The value of the hand is 20 \* 2 + 150 \* 3 + 100 + 30 + 140 \* 2 = 900.

Write a program that takes a hand of cards and counts the sum.

### Input

The input comes from the console**.** The first line **is holding the hand of cards**. Cards are separated by a space.

The second line **is holding a string – “odd” or “even”**. The third line **is holding the magic card**.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

Print at the console a single number: the **value of the hand**.

### Constraints

* The **count** of the cards will be in the range [1…99].
* **Card faces** will beone of the following values: [**2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **J**, **Q**, **K**, **A**].
* **Card suits** will beone of the following values: [**S**, **H**, **D**, **C**].
* Time limit: 0.3 sec. Memory limit: 16 MB.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 2C 2D 2H AS 10H 10C 2S 3S 5D KD  odd  AD | 900 |
| AS KH 10C  even  KD | 250 |
| AS 10C KS KH KD 9H JH QS 3H QD QH 8S 10D 10S 7C JD  even  3D | 1180 |