

Problem 7

Bridge Point Counting

A "hand" in bridge consists of 13 cards. Bidding begins by adding the point value of the hand and then bidding if it is appropriate. You are to write a program which will input the 13 cards in a bridge hand and then calculate the point value of the hand. Each card is represented by two two-digit numbers.

Each number is separated from the preceding number by one space. The first number specifies the rank of the card: 1=ace, 2=deuce, ..., 10=ten, 11=jack, 12=queen, 13=king. The second number specifies the suit: 1=club, 2=diamonds, 3=hearts, 4=spades. Thus:

9 3 = 9 of hearts

1 2 = ace of diamonds

13 4 = king of spades

Calculate the point value of a hand by using the following rules:

- 4 points for an ace
- 3 points for a king in a suit with at least one other card (i.e. at least two cards in the suit).
- 2 points for a queen in a suit with at least two other cards (i.e. at least three cards in the suit).
- 1 point for a jack in a suit with at least three other cards (i.e. at least four cards in the suit).
- 3 points for a suit with no cards.
- 2 points for a suit with only one card.
- 1 point for a suit with only two cards.
- Apply rules f. and g. even if one of the other rules applies.
- Apply rules a. - d. as often as appropriate in any suit

Example: If the hand has K, Q, J of hearts

Add 3 points for the K

Add 2 points for the Q

No points for the J since there are only three cards in the suit.

Example: If the hand has K, 3 of spades

Add 3 points for the K

Add 1 point for a suit with only two cards

Input

The input file will consist of a single line with 26 elements, delimited by a single space. The 26 elements will correspond to 13 alternating rank, suit pairs.

Output

Output should consist of the point value for the supplied bridge hand.

Sample input

```
file.txt
```

Sample input file (file.txt)

```
1 4 11 4 10 4 6 4 13 3 11 3 3 3 9 2 8 2 6 2 1 1 13 1 2 1
```

Sample input file (file.txt) -- translated

```
♠ A J 10 6  
♥ K J 3  
♦ 9 8 6  
♣ A K 2
```

Sample output

```
16
```