## Introduction

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| |  | | --- | | problem **0** | | **Card Counting** | | y points | |  |
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Casinos go through many decks of cards and are probably interested in periodically verifying that all expected 52 cards are there and no extras have managed to slip into the deck. You have decided to help them out with this problem, for a nominal fee.

Write a program that takes in a list of cards and then determines what, if anything is wrong with the deck. Missing cards (if any) first and then extra cards (if any) and the number of extras of that type should be listed.

# Sample Input

The input is a set of lines of cards in the deck. Suits are abbreviated as follows: H=hearts, D=diamonds, C=clubs, S=spades. Thus, for example, “7S” is the seven of spades. The first line of input specifies the number of lines of card input to follow.

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2H 2D 2C 2S

3H 3D 3C 3S

4H 4D 4C 4S

5H 5D 5C 5S

6H 6D 6C 6S

7H 7D 7C 7S

8H 8D 8C 8S

9H 9D 9C 9S

10H 10D 10C 10S

JH JD JC JS

QH QD QC QS

KH KD KC KS

AH AH AH AS

# Sample Output

Missing cards:

AD AC

Extra cards:

AH (2)