
9. Pretty Hands

Program Name: PrettyHands.java

Input File: prettyhands.dat

Playing cards contain a rank and a suit. The possible ranks are Two, Three, Four, Five, Six, Seven, Eight, Nine, Ten, Jack, Queen, King, and Ace. The possible suits are Clubs, Diamonds, Hearts, and Spades. A hand consists of one or more cards. A hand is defined to be *pretty* if:

- all the cards in it are Jacks, Queens, Kings, or Aces regardless of suit, *or*
- all of the cards in it have a rank between Two and Ten inclusive and are a red suit. The red suits are Hearts and Diamonds.

Write a program that, given various hands, prints if they are pretty or not pretty.

Input

- The first line of input will contain a single integer *n* that indicates the number of data sets to process.
- Each data set will consist of two parts.
- The first line of a data set will contain a single integer *m* that indicates the number of cards in the data set.
- The next *m* lines will contain the cards in the data set, one card per line.
 - Each card is listed as <Rank> of <Suit> where <Rank> is replaced with one of the possible card ranks and <Suit> is replaced with one of the possible card suits.
 - A given card may appear multiple times in a single data set.

Output

For each data set print `PRETTY` if the cards in the data set constitute a pretty hand per the problem statement or `NOT PRETTY` if they do not.

Example Input File

```
5
1
Ace of Spades
3
Ace of Spades
King of Hearts
King of Hearts
4
Two of Diamonds
Two of Diamonds
Ten of Diamonds
Seven of Hearts
3
Ace of Diamonds
Ten of Diamonds
Seven of Hearts
3
Seven of Spades
Three of Hearts
Nine of Diamonds
```

Example Output to Screen

```
PRETTY
PRETTY
PRETTY
NOT PRETTY
NOT PRETTY
```