

Intermediate Division**ACSL Poker**

PROBLEM: A deck of playing cards has 52 cards. The cards are separated into 4 suits: diamonds, hearts, spades and clubs. Each suit has 13 cards that are labeled ace, 2 –10, jack, queen and king. For this program diamonds will be numbered 1 –13 to represent the cards ace through king, hearts will be numbered 14 – 26, spades will be numbered 27 – 39 and clubs will be numbered 40 – 52. In ACSL Poker you will be dealt 5 cards. Your task is to determine the best hand possible using those cards. The hands, in order of rank from low to high, to test for are:

A PAIR – Exactly 2 cards with the same label but of any suit - example: a 5 of hearts and a five of clubs. This would be cards - 18 and 44.

TWO PAIRS – 2 different pairs – example: a 5 of hearts and a 5 of clubs and an 8 of spades and an 8 of hearts. This would be cards - 18, 44, 34 and 21.

THREE OF A KIND – Exactly 3 cards with the same label but of any suit – example: a 5 of hearts, a 5 of clubs and a five of spades. This would be cards - 18, 44 and 31.

FLUSH – 5 cards of the same suit - example: 5, 6, 7, 8 and 10 of diamonds. This would be cards – 5, 6, 7, 8 and 10.

FULL HOUSE – A pair and three of a kind – example: a 5 of hearts, a 5 of clubs and a five of spades and an 8 of spades and an 8 of hearts. This would be cards - 18, 44, 31, 34 and 21.

FOUR OF A KIND – Exactly 4 cards with the same label – example: a 5 of hearts, a 5 of clubs, a 5 of spades and a 5 of diamonds. This would be cards - 18, 44, 31 and 5.

INPUT: There will be 5 lines of input. Each line will consist of 5 unique integers from 1 to 52 inclusive.

OUTPUT: For each line of input print the name of the highest hand possible. If no listed hand is possible, print NONE.

SAMPLE INPUT

1. 18, 44, 7, 21, 23
2. 18, 44, 31, 22, 38
3. 18, 44, 31, 34, 21
4. 18, 44, 31, 5, 9

SAMPLE OUTPUT

1. PAIR
2. THREE OF A KIND
3. FULL HOUSE
4. FOUR OF A KIND