

**Senior 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 some or all of 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.

**STRAIGHT** – 5 cards with at least 2 different suits that have consecutive labels – example: 5 of hearts, 6 of clubs, 7 of spades, 8 of spades and 9 of spades. This would be cards – 18, 45, 33, 34 and 35. Note that the ace follows the king in the ranking of the cards.

**FLUSH** – 5 cards of the same suit - example: 5, 6, 7, 8 and 9 of diamonds. This would be cards – 5, 6, 7, 8 and 9.

**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