

ACSL
American Computer Science League
2009 - 2010 **PROGRAM #1**

ACSL BRIDGE JUNIOR

PROBLEM: Bridge is a card game played by 2 pairs of players. Each player gets 13 cards. The partner pairs sit opposite each other and may only communicate with each other by verbal bids. The bids give the partners a good idea of the strength and strong suit of their hands. The idea is to communicate so that a fit, both partners strong in one suit, is found. Partners can't say 'Hey, partner I have at least 5 hearts in my hand and at least 13 points.' A partner would communicate that in an opening bid by saying "One Heart". Although there are several bidding conventions, the basic bidding rules are standard. Points are calculated by adding 4 points for each ace, 3 for each king, 2 for each queen and 1 for each jack in a players hand.

The suits are ranked from high to low as follows: Spades (S), Hearts (H), Diamonds (D) and Clubs (C). A bid of 1 Club is the lowest bid.

THE BIDDING	THE BID
The first person to bid must have at least 13 points and at least 5 S, 5 H, 3D or 3C	Bid One S, H, D, or C
If the first bidder has a tie in the above	Bid the highest suit
If the player does not have 13 points he bids PASS	Bid PASS

INPUT: There will be 5 lines of input. Each line will contain 4 strings. The strings will consist of the letters A (Ace), K (King) Q (Queen), J (Jack) and x (any other card in the deck). The first string represents the Spades in the hand. The second string represents Hearts and so forth in rank order.

OUTPUT: For each input print the number of points and the bid. Both outputs must be correct to score the 1 point for that input.

SAMPLE INPUT

1. AKxx, Qxx, AJxxx, J
2. AKxxx, Qxx, AJxx, J
3. Axx, Qxx, Axxx, Jxx
4. Axxx, Qxx, Jxxx, Jx
5. KQxxx, AKxxx, J, xx

SAMPLE OUTPUT

1. 15, 1D
2. 15, 1S
3. 11, PASS
4. 8, PASS
5. 13, 1S

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TEST DATA

TEST INPUT

1. AKxx, xxx, xxx, AKx
2. AKxx, AKxxx, x, AKx
3. KJxx, Kxxx, QJ, QJx
4. AKxxx, Qxxxx, xx, A
5. AKxx, xxx, xxx, Axx

TEST OUTPUT

1. 14, 1D
2. 21, 1H
3. 13, 1C
4. 13, 1S
5. 11, PASS