

Bidding Strategy:

I have a function in my AIPlayer class called **Suit trump ()**. This function runs through player's hand and stores the total number of each suit in an array. This function will return Suit that is found the most in that player's hand. Let me call this suit which is returned by the above function as maxSameSuit.

I now send this maxSameSuit in the function **int Bid (Suit maxSameSuit)**. The Bid function runs through player's hand and increments aceBid if an ace of the maxSameSuit is found, increments highBid if a KING or QUEEN of the maxSameSuit is found, increments low bid if a card from TWO to TEN of maxSameSuit is found, and increments jackBid if JACK of maxSameSuit is found.

It now checks for the following conditions and returns the bid value as follows:

- If an Ace, King, Queen, Jack and a card from Two to Ten is present, it bids **SMUDGE**.
- If an Ace, King/Queen, Jack and a card from Two to Ten is present, it bids **4**.
- If an Ace, King/ Queen and a card from Two to Ten is present **or** if an Ace, King/Queen and a Jack is present it bids **3**.
- If an Ace and a card from Two to Ten **or** King/Queen and a card from Two to Ten **or** King/Queen and a Jack is present it bids **2**.
- If none of the above condition holds it passes, that is bids **0**.

If every player bid 0, then the cards are re shuffled and the user gets to bid again.

Play a Hand:

- The player who won the bid plays the Ace of a trump if he has it, else he plays a low trump card. The player on the left has to play a trump if he has it. The player who throws the card with highest value gets the trick. The won who wins the trick plays next.
- If the player has an ace of another suit or a high card of suit if an ace is already played, he plays that card. If the player does not have any high card, he plays a low card of any suit.
- The next player plays a high card if he has of the suit being played, else he plays a low trump. If he does not have either of the above, he plays a low card of the suit being played, if even that is not present, he plays a low card of any suit.
- If the first card dealt was not trump and the second or third player plays trump, the following player plays a trump card of higher value if he has it in his hand, else he plays a low card of the suit which was played by the first player.
- The game continues until everyone's cards are empty.
- This runs in loop until a player scores points ≥ 7 .