Programming Test: Game of War

War is a card game in which a standard deck of 52 cards is dealt into two smaller decks of 26 cards each. A turn of war then proceeds with the following rules:

1. 1 card from each deck is revealed.
2. The deck that revealed the higher card wins that round and adds both drawn cards to its own discard pile. Cards are ranked, lowest-to-highest, in the order 2, 3, 4, 5, 6, 7, 8, 9, 10, jack, queen, king, ace.
3. If the two cards are tied this results in a War.
    a. During War each deck must draw two more cards and again compare the value of the last card drawn as done in step 2.
    b. If they are again tied, this triggers a Double War, which works exactly like normal War and requires two more cards to be drawn. This can be repeated indefinitely, until players run out of cards.
    c. If at any point a deck's draw pile runs out of cards they may reshuffle their discard pile into the deck and continue drawing.
    d. If a player runs out of all cards in their deck during a War they simply use the value of the last card drawn.

In this problem we want you to implement a single round of the Game of War given a deck of 52 cards. You have been provided:

- Deck API with the operations:
    - ***Draw:*** Remove and return the top Card from the Deck.
    - ***AddToDiscard:*** Add the given Card to the Deck's discard pile.
    - ***Shuffle:*** Add discard pile to the bottom of the deck and randomize card order
- A main method with an instantiated Deck of 52 Cards.
- A playRound method that takes as parameters two Decks. **You must implement and call this method to play a round of the Game of War when called.**