```
package week6project;


            // TODO Auto-generated method stub
            import java.util.ArrayList;
            import java.util.List;
            import java.util.Random;

            class Card {
                private int value;
                private String name;

                public Card(int value, String name) {
                    this.value = value;
                    this.name = name;
                }

                public int getValue() {
                    return value;
                }

                public void setValue(int value) {
                    this.value = value;
                }

                public String getName() {
                    return name;
                }

                public void setName(String name) {
                    this.name = name;
                }

                public void describe() {
                    System.out.println(name);
                }
            }

            class Deck {
                private List<Card> cards;

                public Deck() {
                    cards = new ArrayList<>();
                    String[] suits = {"Hearts", "Diamonds", "Clubs",
"Spades"};
                    String[] names = {"Ace", "Two", "Three", "Four",
"Five", "Six", "Seven", "Eight", "Nine", "Ten", "Jack", "Queen", "King"};

                    // Populate the deck with cards
                    for (String suit : suits) {
                        for (int i = 0; i < 13; i++) {
                            Card card = new Card(i + 2, names[i] + " of "
+ suit);
                            cards.add(card);
```

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                }
            }
        }

        public void shuffle() {
            Random rand = new Random();

            // Shuffle the deck using Fisher-Yates algorithm
            for (int i = cards.size() - 1; i > 0; i--) {
                int j = rand.nextInt(i + 1);
                Card temp = cards.get(i);
                cards.set(i, cards.get(j));
                cards.set(j, temp);
            }
        }

        public Card draw() {
            if (cards.isEmpty()) {
                return null;
            }

            // Remove and return the top card from the deck
            return cards.remove(cards.size() - 1);
        }
    }

    class Player {
        private List<Card> hand;
        private int score;
        private String name;

        public Player(String name) {
            this.name = name;
            this.hand = new ArrayList<>();
            this.score = 0;
        }

        public void describe() {
            System.out.println("Player: " + name);
            System.out.println("Score: " + score);
            System.out.println("Hand:");
            for (Card card : hand) {
                card.describe();
            }
        }

        public Card flip() {
            if (hand.isEmpty()) {
                return null;
            }

            // Remove and return the top card from the player's
hand
            return hand.remove(hand.size() - 1);
```

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    }

    public void draw(Deck deck) {
        // Draw a card from the deck and add it to the
player's hand
        Card card = deck.draw();
        if (card != null) {
            hand.add(card);
        }
    }

    public void incrementScore() {
        score++;
    }

      public int getScore() {
            // TODO Auto-generated method stub
            return 0;
      }
}

public class Main {
    public static void main(String[] args) {
        // Rules of the card game:
        // The game involves two players.
        // Each player is dealt a hand of cards from a
shuffled deck.
        // Players take turns flipping the top card of their
hand.
        // The player with the higher card value wins the
round and earns a point.
        // The game continues until all the cards in the deck
are exhausted.
        // The player with the highest score at the end wins
the game.

        // Create a deck
        Deck deck = new Deck();

  }

}
```