

```

1  /**
2   * This class holds the Card functionality of the card game such as
3   * allowing Card objects to be created and utilised by other classes.
4   * It also contains methods that allow for card objects to be compared.
5   */
6
7  public final class Card
8  {
9      public int RANK;
10     public int SUIT;
11
12     private final String[] RANKS = {"Ace", "2", "3", "4", "5", "6", "7", "8", "9", "10",
13         "Jack", "Queen", "King"}; // order matters for comparing rank values, takes value and
    compares
14     private final String[] SUITS = {"Hearts", "Clubs", "Spades", "Diamonds"};
15
16     public Card(int rank, int suit) // card constructor for creating card object passing rank and suit
17     {
18         this.RANK = rank;
19         this.SUIT = suit;
20     }
21
22     private String getRank() // returns string rank
23     {
24         return RANKS[RANK];
25     }
26
27     private String getSuit() // returns string suit
28     {
29         return SUITS[SUIT];
30     }
31
32     public int getRankValue() // returns rank value as integer
33     {
34         return RANK+1;
35     }
36
37     @Override
38     public String toString() // returns rank and string of card
39     {
40         String result = getRank() + " of " + getSuit();
41         return result;
42     }
43
44     public int equalEleven(Card otherCard) // checks whether two cards add to eleven
45     {
46         if ((this.getRankValue()) + (otherCard.getRankValue()) == 11) {
47             return 1;
48         }
49         else {
50             return 0;
51         }
52     }
53
54     public int equalJQK(Card otherCard, Card thirdCard) // checks whether three cards are a jack,
    queen and king
55     {
56         if (((this.getRankValue()) + (otherCard.getRankValue()) + (thirdCard.getRankValue()) == 36) //
    checks if all picture cards = 36
57             && this.getRankValue() != otherCard.getRankValue() && this.getRankValue() != thirdCard.
    getRankValue()
58             && otherCard.getRankValue() != thirdCard.getRankValue()) { // and checks if all picture
    card options are different e.g. don't allow king, king and 10
59             return 1;
60         }
61         else {
62             return 0;
63         }
64     }
65 }
66
67

```