

Create a simple card game.

Using a standard deck of card, i.e.

Hearts: 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, A

Diamonds: 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, A

Spades: 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, A

Clubs: 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, A

Where Hearts are worth 4, Diamonds are worth 3, Spades are worth 2 and Clubs are worth 1 times the numeric value of the card. E.g. A2 = $4 * 2 == 8$ and C2 = $1 * 2 == 2$.

Ensure that the deck is shuffled a number of times before dealing the cards to the players. Each of the two players is dealt 5 cards and each hand is evaluated against one another.

Use the following interfaces and classes for your program and implement all methods and attributes.

```
public interface ICard {  
    char suit();  
    int suitValue();  
  
    String displayValue();  
    int numericValue();  
}
```

```
public interface ICardDeck<E> {  
    E take();  
    void add(E e);  
  
    void Shuffle();  
    ArrayList<ICard> Deal();  
  
    int size();  
    boolean isEmpty();  
}
```

```
    int evaluate(ArrayList<ICard> h1, ArrayList<ICard> h2);  
}
```

```
public class Player {
```

```
    private String _name;  
    private ArrayList<ICard> _hand;
```

```
    public Player(String n) {  
        _name = n;  
    }
```

```
    public void acceptHand(ArrayList<ICard> hand)  
    {  
        _hand = hand;  
    }
```

```
    public ArrayList<ICard> getHand()  
    {  
        return _hand;  
    }
```

```
    public void showHand()  
    {  
        for (Iterator<ICard> it = _hand.iterator(); it.hasNext();) {  
            ICard iCard = it.next();  
  
            System.out.println(iCard.toString());  
        }  
    }
```

