

**Lab Goal :** This lab was designed to teach you more object oriented programming and how to write a larger game.

**Lab Description :** Write the Deck class. Deck is a collection of Card references stored in a Stack. Each of the Card references in the Stack will refer to some type of Card object. If you are playing BlackJack, the Card references will refer to BlackJackCard objects. If you were playing Poker, the Card references might be referring to PokerCard objects. The Deck class could be used for any card game. Show that Deck works as intended by instantiating a Deck in the main and displaying all of the shuffled cards in the debug window.

```
public class Deck
{
    public static final int NUMFACES = 13;
    public static final int NUMSUITS = 4;
    public static final int NUMCARDS = 52;

    public static final String SUITS[] = {"CLUBS","SPADES","DIAMONDS","HEARTS"};

    //must use a stack to store the cards

    // constructor
    public Deck()
    {
        //initialize the instance variables
        //add 52 cards to the stack
    }

    public void shuffle(){
        //add code to add 52
        //52 cards to the stack
        //should be random
    }

    public int size() { return 0; }

    public int numCardsLeft(){
        return 0;
    }

    public Card nextCard(){ return null; }

    public String toString(){
        return "stuff goes here";
    }
}
```

### Files Needed ::

Card.java  
BlackJackCard.java  
Deck.java  
DeckTestOne.java

### Sample Output ( DeckTestOne.java )

```
lots of cards

num cards left in the deck == 0

shuffling
num cards left in the deck == 52

lots of cards again
```

