

```

44 public static ArrayList<Card> draw(int num, ArrayList<Card> deck){
45     //create a list we will return
46     ArrayList<Card> hand = new ArrayList<>();
47     //populate the list randomly with cards from the deck given, this will be done num times
48     for(int i = 0; i < num; i++) {
49         hand.add(deck.get(rand.nextInt(52)));
50     }
51     //return the list
52 }

```

Problems Javadoc Declaration Console

<terminated> Main [Java Application] /Library/Java/JavaVirtualMachines/jdk-14.0.2.jdk/Contents/Home/bin/java (Jan 30, 2021, 9:13:51 PM - 9:13:51 PM)

Queen of Hearts  
9 of Clubs  
10 of Hearts  
6 of Clubs  
Queen of Spades

```

1 /**
2  * Name: Gailin Farrington
3  * Class: CSE 205
4  * Professor: Ashwini
5  * Class: MW @ 4:30
6  * Time Spent: 10 Minutes
7  */
8
9 import java.util.ArrayList;
10 import java.util.Random;
11 public class Main {
12     public static Random rand = new Random();
13     public static void main(String[] args){
14         ArrayList<Card> deck = new ArrayList<>();
15         //for loop will iterate through all suits and values to fill the deck ArrayList
16         for(int i = 0; i < 4; i++) {
17             for(int j = 1; j <= 13; j++) {
18                 //will turn i into a suit for the card
19                 String suit = "";
20                 if(i == 0) {
21                     suit = "Diamonds";
22                 } else if(i == 1) {
23                     suit = "Hearts";
24                 } else if(i == 2) {
25                     suit = "Clubs";
26                 } else if(i == 3) {
27                     suit = "Spades";
28                 }
29                 //add the card to the deck
30                 deck.add(new Card(suit, j));
31             }
32         }
33         //create a hand with the draw method
34         ArrayList<Card> hand = draw(5, deck);
35         //print that list
36         for(int i = 0; i < hand.size(); i++) {
37             System.out.println(hand.get(i));
38         }
39     }
40 }
41
42 //will return a list of num Size with random cards from the deck
43 public static ArrayList<Card> draw(int num, ArrayList<Card> deck){
44     //create a list we will return
45     ArrayList<Card> hand = new ArrayList<>();
46     //populate the list randomly with cards from the deck given, this will be done num times
47     for(int i = 0; i < num; i++) {
48         hand.add(deck.get(rand.nextInt(52)));
49     }
50     //return the list
51 }

```

Problems Javadoc Declaration Console

<terminated> Main [Java Application] /Library/Java/JavaVirtualMachines/jdk-14.0.2.jdk/Contents/Home/bin/java (Jan 30, 2021, 9:18:34 PM - 9:18:34 PM)

2 of Hearts  
6 of Spades  
Jack of Spades  
5 of Clubs  
3 of Spades

```

49         hand.add(deck.get(rand.nextInt(52)));
50     }
51     //return the list

```

Problems Javadoc Declaration Console

<terminated> Main [Java Application] /Library/Java/JavaVirtualMachines/jdk-14.0.2.jdk/Contents/Home/bin/java (Jan 30, 2021, 9:18:24 PM - 9:18:24 PM)

Queen of Clubs  
8 of Diamonds  
King of Hearts  
Ace of Hearts  
8 of Clubs

My card dealing program was achieved through the use of ArrayLists acting as sets of cards, whether it be the full deck of 52 or the hand of 5 cards dealt any ArrayList in this program is representing a set of cards. The card method has a constructor to assign the value and suit and a toString method to put the value of the card into an easily printable format. To populate the main deck I used nested for loops, the outside representing the suit and the inside representing each card value inside the suit. My draw() method takes in a number to draw and a deck to draw from and uses the java.util.random library in order to pick a random card. It does this *num*

times and returns a list of those cards. I then print out the newly drawn hand of cards. Above shows three outputs from my program.