Jack Utzerath
CST-105  9am
Exercise 9
12/5/21

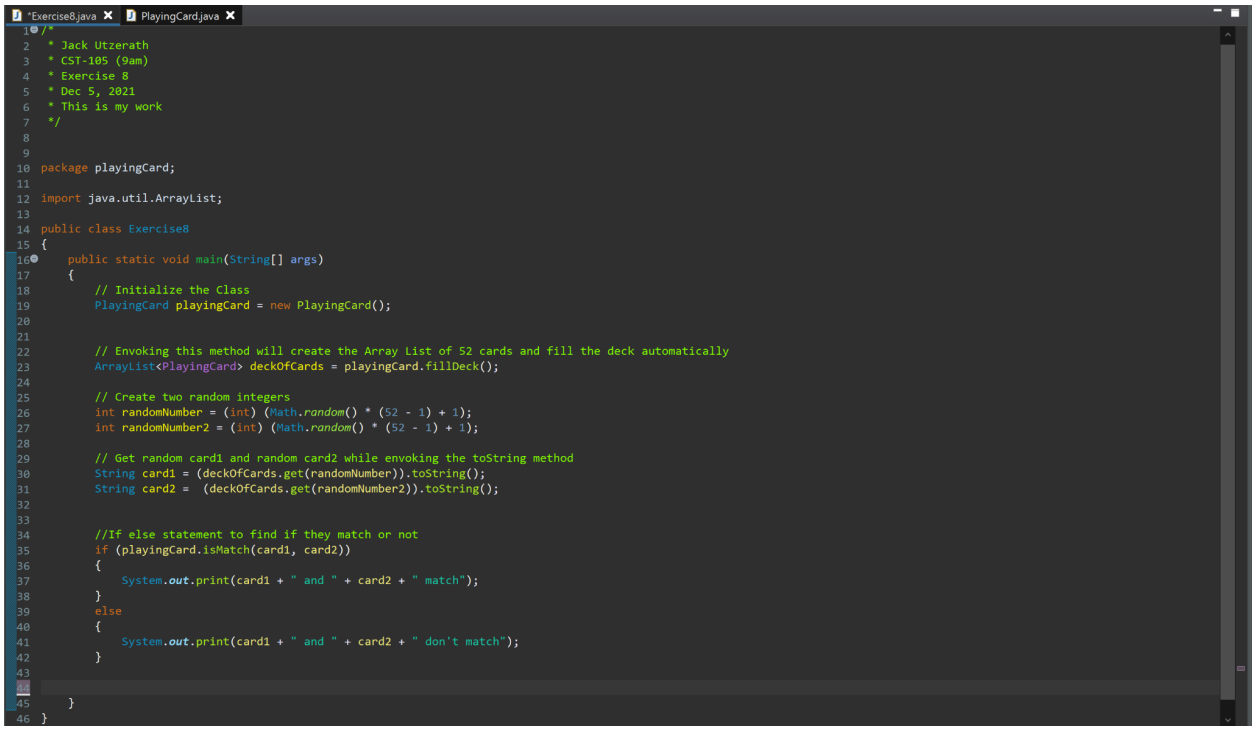
**Loom Video:**

https://www.loom.com/share/84fbbc798f2f4eb082f4112294f00c34

*I fixed my code to where is displays the value then the suit rather than the suit then the value*

**Java Files: I will turn in the .java files to the submission**

**Code Screenshots:**



```java
/*
 * Jack Utzerath
 * CST-105 (9am)
 * Exercise 8
 * Dec 5, 2021
 * This is my work
 */


package playingCard;

import java.util.ArrayList;

public class Exercise8
{
    public static void main(String[] args)
    {
        // Initialize the Class
        PlayingCard playingCard = new PlayingCard();


        // Envoking this method will create the Array List of 52 cards and fill the deck automatically
        ArrayList<PlayingCard> deckOfCards = playingCard.fillDeck();

        // Create two random integers
        int randomNumber = (int) (Math.random() * (52 - 1) + 1);
        int randomNumber2 = (int) (Math.random() * (52 - 1) + 1);

        // Get random card1 and random card2 while envoking the toString method
        String card1 = (deckOfCards.get(randomNumber)).toString();
        String card2 =  (deckOfCards.get(randomNumber2)).toString();


        //If else statement to find if they match or not
        if (playingCard.isMatch(card1, card2))
        {
            System.out.print(card1 + " and " + card2 + " match");
        }
        else
        {
            System.out.print(card1 + " and " + card2 + " don't match");
        }


    }
}
```

*Exercise8.java  PlayingCard.java

```java
/*
 * Jack Utzerath
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 * Exercise 8
 * Dec 5, 2021
 * This is my work
 */



package playingCard;

import java.util.ArrayList;

public class PlayingCard
{

    //Initializing Attributes (Private)

    private int value;
    private char suit;

//-----------------------------------------------
    //Constructor to Initialize the Values

    public PlayingCard()
    {
        this.value = 0;
        this.suit = 'N';

    }

//-----------------------------------------------
    // Create Constructor

    public PlayingCard( int value, char suit)
    {
        this.value = value;
        this.suit = suit;
    }

//-----------------------------------------------
    //Generate getters and setters

    public char getSuit()
    {
        return suit;
    }


    public void setSuit(char suit)
    {
        this.suit = suit;
    }


    public int getValue()
    {
        return value;
    }


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

//-------------------------------------------
    //To String Method

    public String toString()
    {
        String value = "";

        //Switch statement to convert 11-14 into face cards

        switch(this.value)
        {
            case 11:
                value = "J";
                break;
            case 12:
                value = "Q";
                break;
            case 13:
                value = "K";
                break;
            case 14:
                value = "A";
                break;

```
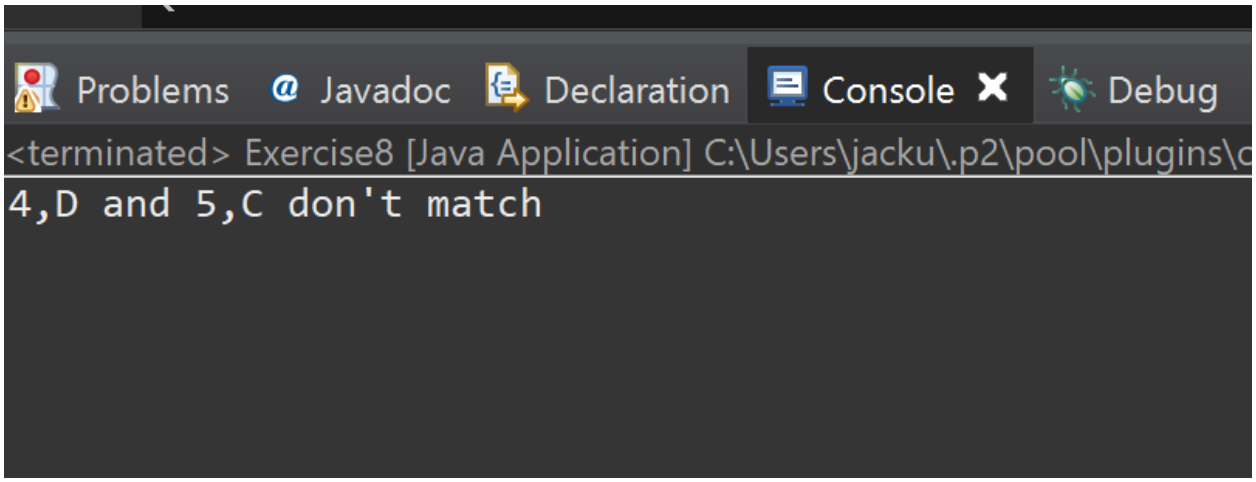
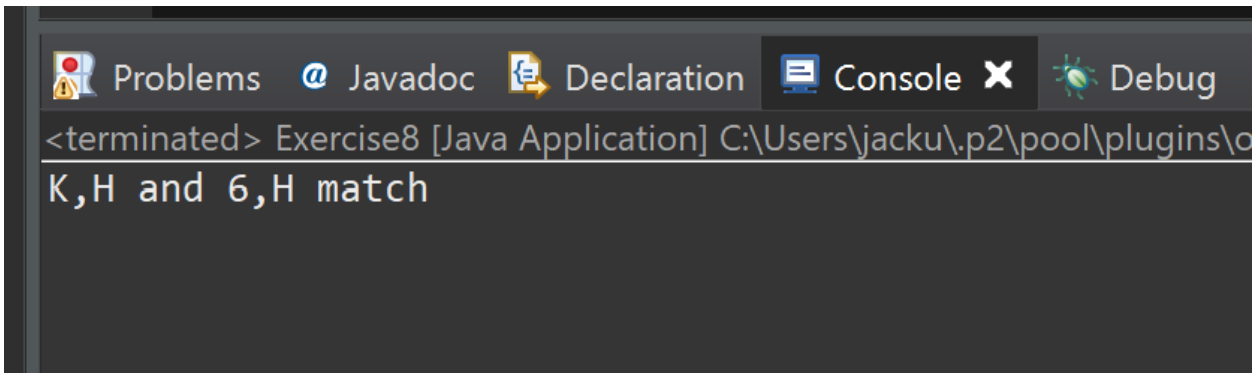

```
            default:
                //Default convert int into string
                value = String.valueOf(this.value);


        }
        //Return the String
        return   value + "," + this.getSuit() ;
    }
//-------------------------------------------------
    //Is Match Method

    public boolean isMatch(String Card1, String Card2)
    {




        char suit = Card1.charAt(0);
        char value = Card1.charAt(2);

        char suit2 = Card2.charAt(0);
        char value2 = Card2.charAt(2);


        if (suit == suit2 || value == value2)
        {
            return true;
        }
        else
        {
            return false;
        }

    }

//-------------------------------------------------

    // This method will create the Array List of 52 cards and fill the deck automatically


    public  ArrayList<PlayingCard> fillDeck()
    {
        ArrayList<PlayingCard> deckOfCards = new ArrayList<PlayingCard>();
```

```
        //Define variable
        char suitType = 'N';

        //For loop to fill array
        for (int suit = 1; suit <= 4; suit++)
        {
            for(int value = 2; value <= 14; value++)
            {

                //Switch Statment to name the suit
                switch (suit)
                {
                    case 1:
                        suitType = 'C';
                        break;
                    case 2:
                        suitType = 'D';
                        break;
                    case 3:
                        suitType = 'S';
                        break;
                    case 4:
                        suitType = 'H';
                }


                //Fill the array at the given parameters
                deckOfCards.add(new PlayingCard(value, suitType));

            }
        }

        //Return the array
        return deckOfCards;

    }
}
//-------------------------------------------------
```

Displays:


Problems
Javadoc
Declaration
Console
Debug
<terminated> Exercise8 [Java Application] C:\Users\jacku\.p2\pool\plugins\c
4,D and 5,C don't match


Problems
Javadoc
Declaration
Console
Debug
<terminated> Exercise8 [Java Application] C:\Users\jacku\.p2\pool\plugins\c
K,H and 6,H match