**CardGame Reflection**

In Card class, I had to return cardNo in compareTo method in order to compare two cards values and using this value for further methods in the game.

In Cards class, for create FullPackOfCards() method, I used a basic for loop to create every 52 card objects one by one.

Then I used Math.random() method in the shuffle() method. It creates a random integer between 0-52 and then I used this integer to swap every each elements of the cards array to a random position. Collections.shuffle() method can also be implemented by this task.

In Player class, I used other classes’ methods to implement some methods, namely add() and playCard().

In ScoreCard class, I had to use an ArrayList to construct the winners array in getWinners() method since initially, I didn’t know the certain range of the array. So, first I created an ArrayList to add the winners that I found with loops which find maxScore and then the players that have this score. Finally I added these ArrayList elements to the winners array and returned it.

In CardGame class, I initialized all the properties in the constructor with reasonable values. I created an ArrayList of 4 players and add them in the constructor. I also called Cards class constructor to create a fullPack of cards. Then I shuffled the deck with shuffle() method. Also, I had to use a loop to initialize cardsOnTable array elements of empty arrays by calling Cards constructor again. Finally I used a nested for loop to distribute the cards to these 4 players.

In the playTurn() method, I basically use the isGameOver() and isTurnOf() to check whether the player’s turn is on or not. A player whose turn is on is adding his top card of the cardsOnTable array. And after all players played, I incremented roundNo integer. I used compareTo and equals method here to determine which player wins the round and gets the score.

I also used, getWinners() method from ScoreCard class to determine which player have won in the getWinners() method in the CardGame class.

In CardGameTest, I tested all these classes and methods in it with creating several objects and println statements. It works fine in my point of view.

In MyCardGame class, scorecard object didn’t show all the scores correctly. It didn’t update roundNo and Scores according to the methods. There were some curly bracket mistakes in the playTurn method which causes this problem and I fixed them.

Lastly, roundNo and playerNo starts with 0 because of my initializations on CardGame constructor. I added 1 to the player No’s on ScoreCard’s toString method and I initialized roundNo with 1 instead of 0. However, turnOfPlayer still starts with 0 in MyCardGame class and I wasn’t able to solve it because if I initialize it with “1”, ArrayIndexOutOfBounds exceptions occur in the arrays which depend on this value.