Due: September 11, Tuesday, **5:00 pm** (zero credit if late turn-in)

Write Java programs as follows:
- Define a public class named **MyCard** as follows:
    - It has states to remember the suit (Spade, Diamond, Heart, Club) and the rank (Ace, 2, 3, …, Jack, Queen, King) of playing cards.
    - One MyCard object represents one card.
    - You may add commands/queries as needed.
    - Commands and queries must not have any side effects.
- Define a public class named **MyDeck** as follows:
    - It has a state to remember the array of 52 MyCard objects.
    - It has a command to shuffle the cards in the deck.
    - It has a query to read all cards in the deck.
    - You may add additional commands/queries as needed.
    - Commands and queries must not have any side effects.
- Define a public class named **Quiz05** as follows:
    - At the beginning of the run, the program displays the following menus with a deck of ordered cards as if you just bought a new deck of cards. Cards are ordered by the suit, and then by the rank.
        1. **Display the deck**
        2. **Shuffle the cards**
        3. **Quit**
        (Choose a menu 1, 2, or 3)
    - When menu 1 is selected, the contents of the card deck is displayed on the screen with three letters **XYY** where **X** represents the card type (S for Space, D for Diamond, H for Heart, and C for Club), and **YY** represents the card value (01 for Ace, 02, 03, ..., 10, 11 for Jack, 12 for Queen, and 13 for King).
        - Do NOT display one card per line. Instead, display cards on the same line with a blank as separator.
        - E.g.: S01 D13 H02 C09 C01 D12 S09 S02 H06 …
    - When menu 2 is selected, the card deck is randomly shuffled.
    - When a menu other than 1 ~ 3 is selected, the program should re-display the menu list with error message of an invalid menu.

Note: You are encouraged to write your own algorithm for the card shuffling. However, it is also acceptable you find an algorithm in the book or Internet. If so, be sure to mention the source of the algorithm clearly in the program as comments.

Turn-in: Submit programs via D2L (Dropbox -> Quiz05 link) as follows (**Do NOT submit them individually**):
1. Create a folder named **quiz05**. Do this outside NetBeans.
2. Copy all java programs into quiz05 folder.
3. Compress quiz05 folder.
4. Submit quiz05.zip via D2L.

Grading Policy:
- Similar to previous ones.