CMPG221 D: Practical Assignment 3.3 **[20]**

In Assignment 3.1 you created a wrapper class Card and a getCount method for the array list.

In Assignment 3.2 you created an isAllGuessed and isFull method. You also loaded random pairs of values in the 4 lists that you created.

Assignment 3.3 is the final part and this is where you will make it all come together for the Memory Card game.

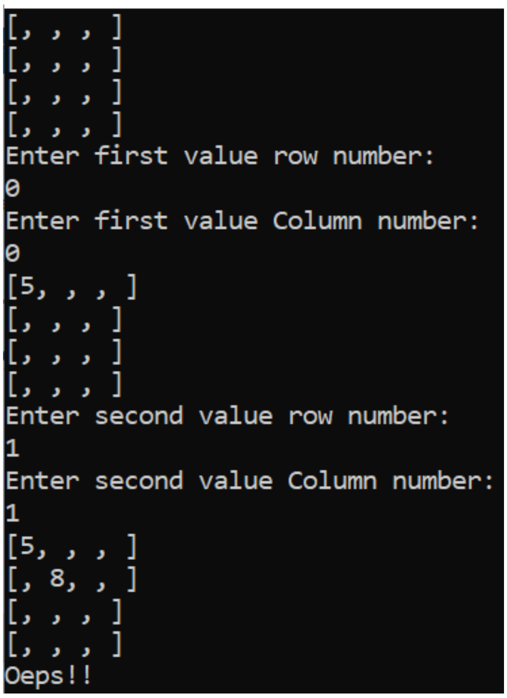
Create a method called showAll for the test program. The method must display the 4 array lists. (3)

Create a method called checkWin that uses isAllGuessed to determine if all cards have been guessed to determine if the player is a winner. (5)

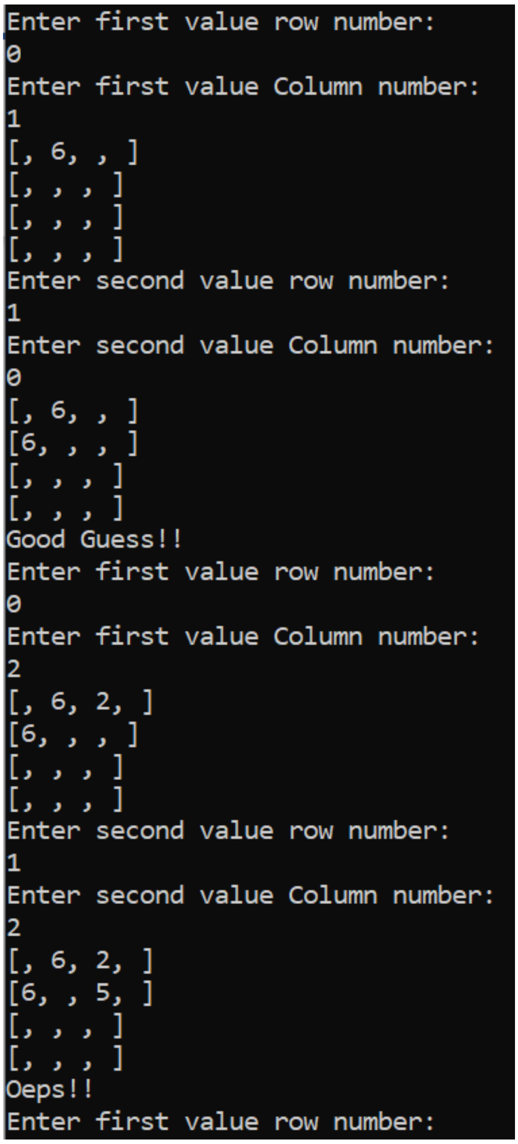
Write code to prompt the user for 2 row and 2 column values (for the first and second cards guessed). Use the mutator methods to alter the guessed Boolean values for the guessed cards. Use showAll to display the array list now displaying the guessed cards. If the guesses are unsuccessful, set the guessed property back to its original value. If successful, display a message to the user and check if the player is a winner.

Make use of good error checking. Do not allow out of bounds entered values and do not allow the player to guess a card that was already guessed successfully. (12)

Below are screenshots of the game after the final Part 3 has been completed.



```
[, , , ]
[, , , ]
[, , , ]
[, , , ]
Enter first value row number:
0
Enter first value Column number:
0
[5, , , ]
[, , , ]
[, , , ]
[, , , ]
Enter second value row number:
1
Enter second value Column number:
1
[5, , , ]
[, 8, , ]
[, , , ]
[, , , ]
Oeps!!
```



```
Enter first value row number:
0
Enter first value Column number:
1
[, 6, , ]
[, , , ]
[, , , ]
[, , , ]
Enter second value row number:
1
Enter second value Column number:
0
[, 6, , ]
[6, , , ]
[, , , ]
[, , , ]
Good Guess!!
Enter first value row number:
0
Enter first value Column number:
2
[, 6, 2, ]
[6, , , ]
[, , , ]
[, , , ]
Enter second value row number:
1
Enter second value Column number:
2
[, 6, 2, ]
[6, , 5, ]
[, , , ]
[, , , ]
Oeps!!
Enter first value row number:
```