Object-oriented Programming Language (Java) Fall 2021
HOMEWORK #2 ☺
This homework is Due in one week

1. Goal: Students will be needed to
   - Learn how to create a Java project with many class files in NetBeans/Eclipse IDE.
   - Learn how to use Java **class/objec**t, **instance methods** and **static methods**.
   - Learn how to perform object-oriented analysis and design for Card games.
   - (Optional) Write and debug the Big2 card game in Java with a main function to test its correctness in Eclipse IDE.
   - You need to follow the provided project and use those predefined classes.

2. OOAD: Big2 card game will contain the following classes.
   (Hints: Rules of Big2 please check http://www.pagat.com/climbing/bigtwo.html.)
   - Card class
     - Fields: rank and suit
     - Methods: setter & getter, toString method to show Card inf.
   - Deck class:
     - Fields: Array of Cards.
     - Object methods: shuffle, deal
   - (Optional) Player class   (optional)
     - Class methods: findPairs(Card[] cards) , findTriples, findQuads (four of a kind), findFlush, findFullHouses and findStraights, findStraightFlush.

3. (Optional) In Player class, implement **findPairs(Card[] cards) , findTriples, findQuads (four of a kind), findFlush.**
   - You may need to use two dimension array to return pairs, triples, …

4. (Optional) Bonus points: In Player class, implement **findFullHouses and findStraights, findStraightFlush.**

5. Upload and Hand in your homework assignment
   - **Comment your code (20% off) & generate Java doc (20%)**
   - **Write a MS word report containing 1. Source code, 2. Outputs 3. Lessons learned and conclusion.**
   - **Zip your code, Java doc (html) and report to a zip file (i.e. I2B01_NAME_hw2.zip)**
   - **Upload the zip file to tronClass web under HW2.**

   Do your assignment as soon as possible. Don't wait till the last minute.