# 1. The player's strategy that you implemented:

Making bet: 0.1 \* current\_chips + 1

**Buy insurance:** 

If the player got an Ace open card at beginning, player would have 3.33% chance to buy insurance. Else if player didn't get Ace, it would have 80% chance to buy insurance.

### **Surrender:**

33.3% chance to surrender in any situation.

### Split:

Split only when player got 2 Ace at beginning.

### double:

Do double if the current chips > half of the initial chips

#### Hit:

Just 50% to hit or not.

# 2. The design of all the classes related to the casino, and the reason that you chose this design:

POOCasino.class: simply the game was run on this class.

Shuffler.class: to shuffle the cards

RandomIndex.class: to generate random index for Shuffler.class

Player\_B02902096: My player extends the Player.class from the course.

PlayerB0290269: My Classmate's player class.

# 3. The result of the duel between you and your classmate (her/his name and school ID), and any experience that you two learned during the duel.

### The final round (every player's broke)

```
Player_B02902096(Player1) is broke
PlayerB02902069(Player2) is broke
Player_B02902096(Player3)'s status:0.0
PlayerB02902069(Player4) is broke class
player 3's bet = 1.0
player 3's start hand : (2.5 3.9 Name@(Native
Dealer's start hand : 2 (9 a 1 8 or Name (Class java: 191)
Player 3's hand otasino.main(POOCasino.java:70)
2 5 a 3 9 *** [run] Error 1
player 3 standack haos
Dealer stand
Player 1 point = 0
Player 2 point = 0
Player 3 point = 14
Player 4 point = 0
dealer point = 17
Player 3 is broke.
Player_B02902096 (Player3)'s status:-1.0
```

# A normal round:

```
round 28 :
Player_802902096(Player1)'s status:11059.5
PlayerB02902069(Player4)'s status:I still have 14384.0 dollars!
player 1's bet = 482.0
player 2's bet = 1726.0
player 3's bet = 785.0
player 4's bet = 1438.0
                         9 4 10 SSL
player 1's start hand : 1 7
player 2's start hand: 2 6 11
player 3's start hand : 3 4 1 5
player 4's start handa: 4e8 .4x13:lassLoader.defineClass(URLClassLoader.java:449)
ealer's start hand : 3 10
player 1 hit.
layer 1's hand :
   4 10 4 1
player 1 hit.
 layer 1's hand :
   4 10 4 1 3 8
player 1 busted. java
Player 2's hand: sun
26 11
layer 2 stand.
player 3 hit.
Player 3's hand: java.lang.Class.forName(Class.java:191)
 4 15 47<sub>01</sub>
player 3 hit.
Player 3's hand :
   11514870360ck haos
player 3 busted.
Player 4's hand :
   4 13
layer 4 stand.
Dealer stand
Player 1 point = 26
Player 2 point = 17
Player 3 point = 22
Player 4 point = 18
dealer point = 18
Player_802902096 (Player1)'s status:10577.5
PlayerB02902069 (Player2)'s status:I still have 15540.0 dollars!
Player_802902096 (Player3)'s status:13511.0
PlayerB02902069 (Player4)'s status:I still have 12946.0 dollars
```

# Duel Friend B02902069 王皓正

I think it's a special experience to make this duel.

I can find the difference of designing a customer player.

My friend's strategy of making bet is wilder than mine, thus we can find that his bet is usually larger than me.

But his hit strategy is much careful than mine, maybe it's the reason why His player usually win more money than mine.

It's really cool to find that two variants of player can demonstrate two different personalities between us.