### B02902096 王浩恩 FOOP HW2 Report

### How to play POOCasino:

- 0. Compile my source java code through "make" command
- 1.Use *java POOCasino* to start game.
- 2. Enter the bet and the system will deal five sorted card to your hand.
- 3. Decide which cards you would like to keep.
- 4. The system discard the cards you don't want,
- 5. The system distributes new cards to fill up your hand.
- 6.then you will get payoff by system according to your new hand.
- 7.next round or quit.

#### How do I test the correctness of POOCasino:

Some of the hand cases have a extremely low probability to appear, thus I create test hand vectors for each case, and find the result is correct. I also play it many thousands of time to check there's no mistake when judging hands and payoff.

## The output of three rounds:

```
POOCasino Jacks or better, written by b02902096 OOP is OP.
Please enter your name: Brian
Welcome, Brian
You have 1000 P-dollar now.
Please enter your P-dollar bet for round 1 (1-5 or 0 for quitting the game):10
Please enter a valid bet.
Please enter your P-dollar bet for round 1 (1-5 or 0 for quitting the game):5
(a) S1 (b) C3 (c) H6 (d) H8 (e) D11
Which cards do you want to keep?a
Okay. I will discard
(b) C3 (c) H6 (d) H8 (e) D11
Your new cards are S1 C2 S3 C11 H13.
You have 995 P-dollar now.
Please enter your P-dollar bet for round 2 (1-5 or 0 for quitting the game):5
(a) D2 (b) H3 (c) D4 (d) C9 (e) S11
Which cards do you want to keep?abc
Okay. I will discard
(d) C9 (e) S11
Your new cards are D2 H3 D4 C10 D13.
You have 990 P-dollar now.
Please enter your P-dollar bet for round 3 (1-5 or 0 for quitting the game):5
(a) C1 (b) S1 (c) H3 (d) C9 (e) D9
Which cards do you want to keep?abcde
Okay. I will discard
Your new cards are C1 S1 H3 C9 D9.
You get a two pair hand. The payoff is 10
You have 995 P-dollar now.
```

## Structure:

I added Judge.class in addition to the classes mentioned in spec,which will take the responsibility to judge the final hand of player,decide what's it payoff. I think it can simplify the code in Computer.class also make this function more "objective".

### **Bonus:**

# In purpose to avoid illegal player input:

If a player entered a non-integer or integer beyond 0~6 bet, the System will ask player to enter a valid bet again. Also while discarding cards, if a player enter characters beyond 'a' to 'e', those chars will be ignored, and if any character was entered more than once, there's no difference to entering once.