## (1)R03527017 Yen Cheng, Wang 王嚴徵

## (2) How to play this game? (Game instructions)

1. When you execute the game, it will show the title of the game and the info of the program maker to you. Then, it will ask you to key in your name (You can use space to separate apart your first name and last name)

```
POOCasino Jacks or better, written by rO3527017 Yen-Cheng Wang
Please enter your name: _
```

2. After keying in your name, the program will show greetings to you and contribute 1000 P dollars to you which used as chips to play this game!

```
Please enter your name: Yen Cheng,Wang
Welcome, Yen Cheng,Wang
You have 1000P-dollars now.
```

3. When the game start, it will ask you to use 1~5 P dollars as wager to play this game, so you have to key in number 1~5, if the number is less than 0, the computer will assign the P dollars you bet to 1, in addition, if the number is more than 5, the computer will assign the P dollars you bet to 5. The more P dollars you bet, the more money that you can win if you get great hand card\*. Notice that you can only key in number instead of Strings.

```
Please enter your P-dollar bet for round1(1-5 or 0 for quitting the game
3
```

\*The rule of the hand card is shown below (from professor's hw announced)

hand	1 P-dollar	2 P-dollars	3 P-dollars	4 P-dollars	5 P-dollars
royal flush	250	500	750	1000	4000
straight flush	50	100	150	200	250
four of a kind	25	50	75	100	125
full House	9	18	27	36	45
flush	6	12	18	24	30
straight	4	8	12	16	20
three of a kind	3	6	9	12	15
two pair	2	4	6	8	10
Jacks or better	1	2	3	4	5
others	0	0	0	0	0

4. The computer will distribute 5 cards to you from a shuffled card deck, using (a)~(e) to tag them and asking you to choose which cards you would like to keep. You can key in the English alphabet in lower case of the cards that you want to keep. You can key in the alphabet in any order but you have to type all alphabet at one time.

```
Your card are(a) CJ (b) CD (c) D5 (d) HK (e) SK
Which cards do you want to keep?
Key in "nothing" if you want to drop all cards
de
```

5. Afterward, the Computer will show the cards that you have dropped and distribute new cards to you to make you have 5 hand cards. The computer will tell you which type of card that you get, the P dollars that you win, and the current P dollars that you now have at once.

```
Ok, I will drop D5 CQ CJ
Your new cards are C6 C8 HK S4 SK
You get a Jack or better!
The payoff is 3
You have 1000 P-dollars now.
```

6. The computer will ask you the P dollars that you want to bet in the next round. If you want to quit the game, you just need to key in 0 and then the computer will say goodbye to you, show the total round you have played and the P dollars that you have.

```
Please enter your P-dollar bet for round2(1-5 or 0 for quitting the game
O
Good bye, Yen Cheng,Wang You played for 1 round and have 1000 P-dollars now.
```

## (3) How to test the correctness of program?

I usually use "System.out.print()" to figure out the wrong methods or instructions if my program get stuck when executing. For example, the method "printout()" in class "Computer", I use this to check the hand card and private data to assure the correctness of the process of recognizing card's type or clear data.

Internet can usually offers great suggestion for my logic design of the program when I can not get reasonable outcome or some wrong messages appear. In addition to that, I also simulate varieties of condition to try my program in person in order to find out potential problems of my program or new ideas to make the program work better.

## (5) Other personal design to make a better program

- 1. Help the player to bet reasonable P dollars when they bet P dollars more than 5 (help them assign to five) or less than 0 (help them assign to zero). In addition, inform them of the changing.
- 2. Players can ignore the order of alphabets when choosing the cards that they want to keep(But they need to key in in lower case).
- 3. The player can key in "nothing" to drop all of their current hand cards.
- 4. Use getter to approach private data.
- (4) Output of 3 rounds of the games from my program. (See the following page)

```
S:\Javaspace>java HwZ2
POOCasino Jacks or better, written by rO3527017 Yen-Cheng Wang
Please enter your name: Scott Wang
Welcome, Scott Wang
You have 1000P-dollars now.
Please enter your P-dollar bet for round1(1-5 or 0 for quitting the game
Your card are(a) D6 (b) D2 (c) H3 (d) S3 (e) S5
Which cards do you want to keep?
Key in nothing if you want to drop all cards
abce
Ok, 1 will drop S3
Your new cards are C6 D2 DJ H3 S5
 orry. You get nothing!
The payoff is 0
You have 995 P-dollars now.
 lease enter your P-dollar bet for round2(1-5 or 0 for quitting the game
Your card are(a) C10 (b) D7 (c) H10 (d) S7 (e) SQ
Which cards do you want to keep?
Key in "nothing" if you want to drop all cards
abcd
Ok. 1 will drop SO
Your new cards are C6 C10 D7 H10 S7
You get a two pair!
The payoff is 6
You have 998 P-dollars now.
Please enter your P-dollar bet for round3(1-5 or 0 for quitting the game
Which cards do you want to keep?
Key in "nothing" if you want to drop all cards
Ok, 1 will drop S9 S8 S4 D7
Your new cards are C7 C8 CK D3 SA
 erry. You get nothing!
The payoff is 0
You have 993 P-dollars now.
 lease enter your P-dollar bet for round4(1-5 or 0 for quitting the game
Good bye, Scott Wang You played for 3 round and have 993 P-dollars now.
 :\Javaspace>_
微軟注音 半
```