# Blackjack game implemented in Python

**The rules of the game**

The details are as follows:

1. The players are human players and computer players, a total of 2 players.The computer is the bookmaker.

2. First hand two CARDS to human players and two to computer players.

3. Judge whether the CARDS of both sides are blackjack. If one side is blackjack, the victory will be directly judged and one point will be scored in the total score.If both sides are blackjacks, both sides are drawn and no points are scored

4. If there is no blackjack, the human player will decide whether to take a card according to the card surface. If he wants a card, he will get a card in the deck and judge again.If the number of points on a human card exceeds 21 points, it is directly negative.

5. If the human player stops asking for CARDS and is not judged negative because of more than 21 points, then the computer asks for CARDS (the computer asks CARDS based on an algorithm, later if updated, the algorithm should be based on the estimation of the winning rate). After the computer stops asking for CARDS, it will judge the winning or losing situation with the human.The winner adds one point.

6. The human player decides whether or not to proceed to the next round, and if so, continues dealing from the remaining deck to begin the process.If you do not continue, the total score is calculated to determine who wins.

7. If there are not enough CARDS in the deck to play one round, the game is over automatically.Humans can choose whether to play again.

**Program function**

To realize the rules of the above game, the function of the program is divided as follows, different functions with different functions to achieve code reuse.

1. Deck: during the process of dealing, CARDS that have been dealt are removed from the deck

2. Deal: when you want a card, you need to pick a random card from the deck

3. Scoring: can calculate the score of the CARDS in the opponent, which needs to consider the particularity of relying on A

4 victory and defeat judgment: when the end to card, can judge the victory and defeat through the score

5. Want a card or not: a function that allows you to determine whether to continue to want a card

6. End of game judgment: let you decide whether to end the game early or not. If not, it will automatically end the game when the number of CARDS in the deck is small

7. The process of a round of the game

**The result of the execution of a program**











