

For C-level For B-level For A-level For extra credit

## Dealing

1. instructions()
  - a. Introduce game and rules
2. makeADeckOf52()
  - a. Credit to Nanette
  - b. Make the card numbers 0-51 not 1-52?
  - c. Adapt to fit card class
3. (hand,deck) = dealAHand(deck)
  - a. Create a 2-card hand, remove cards from deck
  - b. hand.append(deck.pop())
  - c. Adapt to fit card class
4. blackJackValue = bjHandValue(hand)
  - a. Count value of hand, ace=1, face cards=10
  - b. Adapt to fit card class
5. displayHand(hand)
  - a. Print hand list in terms of values and suits
  - b. Use two dictionaries to look up suit/value from 0-51 number
  - c. Adapt to fit card class
6. Call functions in main()
  - a. Describe IPO for each function
7. Write Card class
  - a. \_\_init\_\_()
  - b. \_\_str\_\_()
  - c. cardNum, faceValue, suit are variables
  - d. bjValue variable
8. Player class
  - a. Hand, hand value, games won, player name

## Playing

9. Write main setup for a single turn
  - a. Deal 2 card hand
  - b. Display hand
  - c. Display value at end of turn
  - d. Add option to get another card until game ends
    - i. Give 1 card until decline or until cards' value >21
10. turn(deck)
  - a. Calculate and return bj value and smaller deck
  - b. Include 2nd player turn completely after 1st player turn is over
    - i. Use same function and functions inside turn
11. main() winner is greatest bjvalue <=21, or they tie
12. Let aces be high if it'd make hand value <=21 still