

# Version 11 Pseudocode

Main

{

Set random number seed

Define classes and variables

Draw dealer cards

If an ace is drawn, make its value 11 if it doesn't bust the dealer

Increment number of cards in play

Draw player cards

Increment number of cards in play

Output dealer's first card and player's two cards

If the player draws a(n) ace(s) gets their choice for the aces value(only allows 1 or 11)

Gets the player's choice to hit or stay with input validation

If stay is chosen,

Calculates player and dealer card total

Reveals dealer's second card

If dealer's card total is  $\leq 16$ ,

draws cards, iterates cards in play

repeats until a total of  $>16$  is achieved

If dealer draws ace, sets it to 11 if it doesn't bust the dealer

Calculates dealer card total

Output dealer's cards

```

If hit is chosen, loops until stay is chosen
    Calculates player and dealer card total
    Draw card and iterate cards in play

    Display card drawn
    If ace is drawn, get choice for ace value(only allows 1 or 11)
    Add card value to player card total

    If player card total >= 21, set choice to stay
    If player card total < 21, get choice to hit or stay(with input validation)

    Reveals dealer's second card
    If dealer's card total is <= 16,
        draws cards, iterates cards in play, and checks
        repeats until a total of >16 is achieved
        If dealer draws ace, sets it to 11 if it doesn't bust the dealer
        Calculates dealer card total
        Output dealer's cards

Find difference of dealer and player total from 21
Find and output game results based on difference

Output the game results

Define map and vector to hold result message and game name
If win result is win, message is winner
If win result is lose, message is loser
If win result is draw, message is draw

Write the result message to a binary file

Outputs queue of winning hand
Output the number of cards used in the game
Outputs the highest and lowest values played
Output exit message

Free up the used memory and exit the program

}

```