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## This is the pseudocode of the program ##
# Please note that this may be incomplete of the actual program
# This is built off from the specification of the program
# Some notes concerning the game
# Blackjack(naturals) trumps 21 Ex: 6 + 7 + 8 loses to Ace + 10
# Dealer must keep dealing til he is 17 or above
## Functions for the blackjack game ##
def check_if_above_21:
  Look at the hand
  Do a soft value of the hand
  If the total value is already above 21 bust the hand
  For each card in hand
    If it is an ace and soft count is <11
      Add 10 to the total
  Return the final count
def generate_card():
  card_name = [A,2,3,4,5,6,7,8,9,10,J,Q,K]
  card_suit = [C, H, D, S]
  Pick a random card name
  Pick a random card suit
  Return card_name + card suit
## Pregame set up ##
If the player has lower money than the minimal bet(10$):
  Tell the player they are broke and shoo them off
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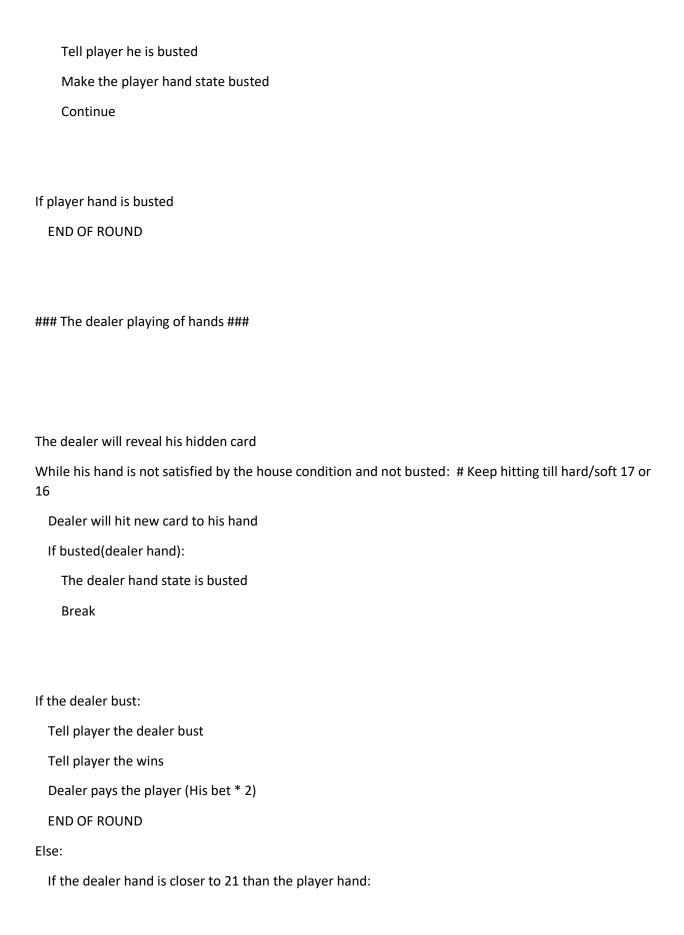
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Player walks up to the table
Clear the dealer hand
Clear the player hand
Clear the current bet of player
Player will put down some amount of bet
  If the player didn't give a number the dealer will keep asking
  IF the player gives a negative bet, the dealer will keep asking
  If the player says a number bigger than what he has, the dealer will keep asking for a valid bet
Take away that amount of bet from the player
Dealer will deal 2 cards faceup to the player
Dealer will deal 1 faceup card and 1 facedown card to himself
## Check for blackjacks ##
If the player has blackjack:
  Dealer will reveal his card
  If the dealer DON't have blackjack
    Tell the player he got a blackjack
    Pay the player according to (His bet * House rate for blackjack)
    END OF ROUND
  Else
    Tell the player the bets are pushed
    Pay the player according to (His bet) (Since it is a pushed hand)
    END OF ROUND
If the dealer has a face up card with a value of 10 or Ace:
  The dealer check if they have blackjack
  If the dealer has blackjack:
    Dealer reveals his cards
```

Tell the player he is unlucky and the dealer has blackjack

END OF ROUND

Tell player the value of his hand

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## Player main playing decision ##
  ## Checking for bust and ending of hand ##
While the player hand is not busted or over
  Ask the player what they want to do
  If they give an invalid response
    Clear the response
    Ask the player the give a new response
    Continue
  If the player choose to stand his hand:
    The hand will be "over"
  If the player choose to hit:
    The dealer will add one more card to the hand
  If the player choose to double down:
    If the hand is allowed to be doubled down: # Only having 2 cards
      Ask the player how much they want to add
      The player will add up to an equal amount of money to the initial bet on the hand
      The dealer will hit one more card to the hand
      The hand is over
    Else:
      Tell the player they can't double down
  If busted(hand):
```



The dealer will payout that hand according to a house rate (Bet * win rate)

If the dealer hand is the same as the player hand:

The bets are pushed

If the dealer hand is farther away from 21 than the player hand:

The player loses his hands bet

END OF ROUND