Pseudocode; Part 1

BEGIN

DECLARE playerCards as ArrayList of string

DECLARE dealerCards as ArrayList of string

DECLARE playerMoney as integer

DECLARE deck as ArrayList of string

DECLARE suits as string array

DECLARE wager as integer

DECLARE playerCard as string

DECLARE dealerCard as string

DECLARE playerValue as integer

DECLARE dealerValue as integer

DECLARE warPile as ArrayList of string

DECLARE winner as integer

DECLARE scan as Scanner

PRINT "Welcome to Casino War!"

PRINT "Dealing cards..."

suits = ["Hearts", "Diamonds", "Spades", "Clubs"]

FOR each suit in suits

FOR i = 2 to 10

deck.add(i + " of " + suit)

END FOR

deck.add("Jack of " + suit)

deck.add("Queen of " + suit)

deck.add("King of " + suit)

deck.add("Ace of " + suit)

END FOR

FOR i = 0 to 25

playerCards.add(deck[i])

dealerCards.add(deck[26 + i])

END FOR

playerCards.shuffle()

dealerCards.shuffle()

WHILE playerCards is not empty AND dealerCards is not empty

PRINT "You have $" + playerMoney + ". How much do you want to wager?"

scan = new Scanner(System.in)

wager = scan.nextInt()

WHILE wager > playerMoney

PRINT "You don't have enough money. Enter a new wager:"

wager = scan.nextInt()

END WHILE

playerCard = playerCards[0]

dealerCard = dealerCards[0]

PRINT "Your card: " + playerCard

PRINT "Dealer's card: " + dealerCard

playerValue = getCardValue(playerCard)

dealerValue = getCardValue(dealerCard)

IF playerValue > dealerValue

PRINT "You win this round and earn $" + wager + "!"

playerMoney = playerMoney + wager

playerCards.remove(0)

dealerCards.remove(0)

ELSE IF playerValue < dealerValue

PRINT "Dealer wins this round and you lose $" + wager + "."

playerMoney = playerMoney - wager

playerCards.remove(0)

dealerCards.remove(0)

ELSE

PRINT "War!"

warPile.add(playerCard)

warPile.add(dealerCard)

WHILE playerCards[0] equals dealerCards[0]

PRINT "Another war!"

warPile.add(playerCards[0])

warPile.add(dealerCards[0])

playerCards.remove(0)

dealerCards.remove(0)

END WHILE

winner = (valueOfCard(playerCards[0]) > valueOfCard(dealerCards[0])) ? 1 : 0

IF winner is 1

PRINT "You win the war and earn $" + wager + "!"

playerMoney = playerMoney + wager

FOR each card in warPile

playerCards.remove(card)

END FOR

ELSE

PRINT "Dealer wins the war and you lose $" + wager + "."

playerMoney = playerMoney - wager

FOR each card in warPile

dealerCards.remove(card)

END FOR

END IF

END ELSE

END WHILE

IF playerCards is empty

PRINT "You have run out of cards. The dealer wins."

ELSE

PRINT "The dealer has run out of cards. You win!"

END IF

PRINT "You leave the casino with $" + playerMoney + "."

END