**Pseudocode**

**CardGame class - (Main class )**

It is where the main actor system is created

**main method**

Create an actor system “user”

Create an object new dealer actor

Ask the dealer actor to start the game which returns a future object

Wait till the future gets the result from the dealer actor

Display the result

Shutdown the system

**Dealer class**

**onReceive**

if message received is instance of StartGame

get the sender who send the message

create a game actor to send the card

create a cardDeck with the help of Card class

shuffle the card deck randomly

tell the game actor the cardDeck

if message is PlayerValuation

validate the player

if player1 points is greater then player2 points

store the player 1 details

else

store the player 2 details

tell the sender player details stored for final output

**validate**

initialize the totalpoints

initialize the totalpoints for player 1

initialize the totalpoints for player 2

calculate the total score of all the cards

Loop the total player 1 deck

Add the total points scored by player 1

Loop the total player 2 deck

Add the total points scored by player 2

Check if totalpoints is equal to player 1 points plus player 2 points

If totalpoints for player 1 is equal to scores reported by player 1

Player 1 dint cheat

Else

Player 1 cheated the game

If totalpoints for player 2 is equal to scores reported by player 2

Player 2 dint cheat

Else

Player 2 cheated the game

**Game class**

**onreceive**

get the card deck from the dealer

split the card deck between player 1 and player 2

Loop from 0 to cardDeck /2

Pop the player1 card

Pop the player 2 card

If player 1 card is greater then player 2 card

Add player 1 card in player 1 deck

Add player 2 card in player 1 deck

Else if player 1 card is lesser then player 2 card

Add player 1 card in player 2 deck

Add player 2 card in player 2 deck

Else

If the both have same rank

Compare the suit both player 1 and player 2 have

If player 1 suit is greater than player 2 suit

Add player 1 card in player 1 deck

Add player 2 card in player 1 deck

Else

Add player 1 card in player 2 deck

Add player 2 card in player 2 deck

Store the results of both player 1 and player 2

Send the results to the dealer to publish the winner

**Sequence Diagram**

