IN

Have Blinds gone up?

Yes

Increase blinds

No

Put Blinds in Pot

Deal Cards

```mermaid
flowchart TD
    A[Round of betting] --> B{At least 2 players left?}
    B -->|Yes| C[Reveal flop cards]
    B -->|No| X
    C --> D[Round of betting]
    D --> E{At least 2 players left?}
    E -->|No| X
    E -->|Yes| F[Reveal turn card]
    F --> G[Round of betting]
```

Round of betting

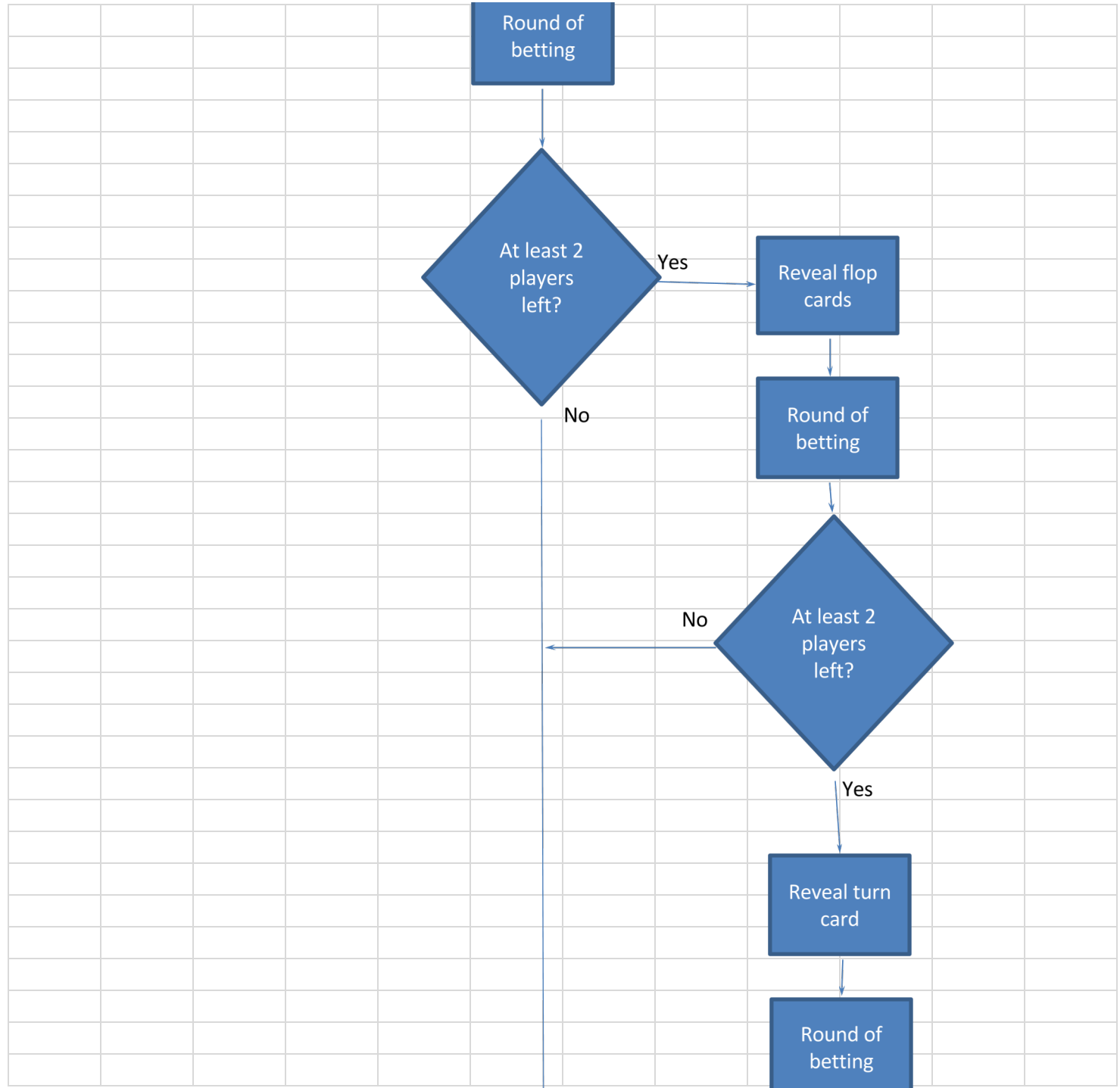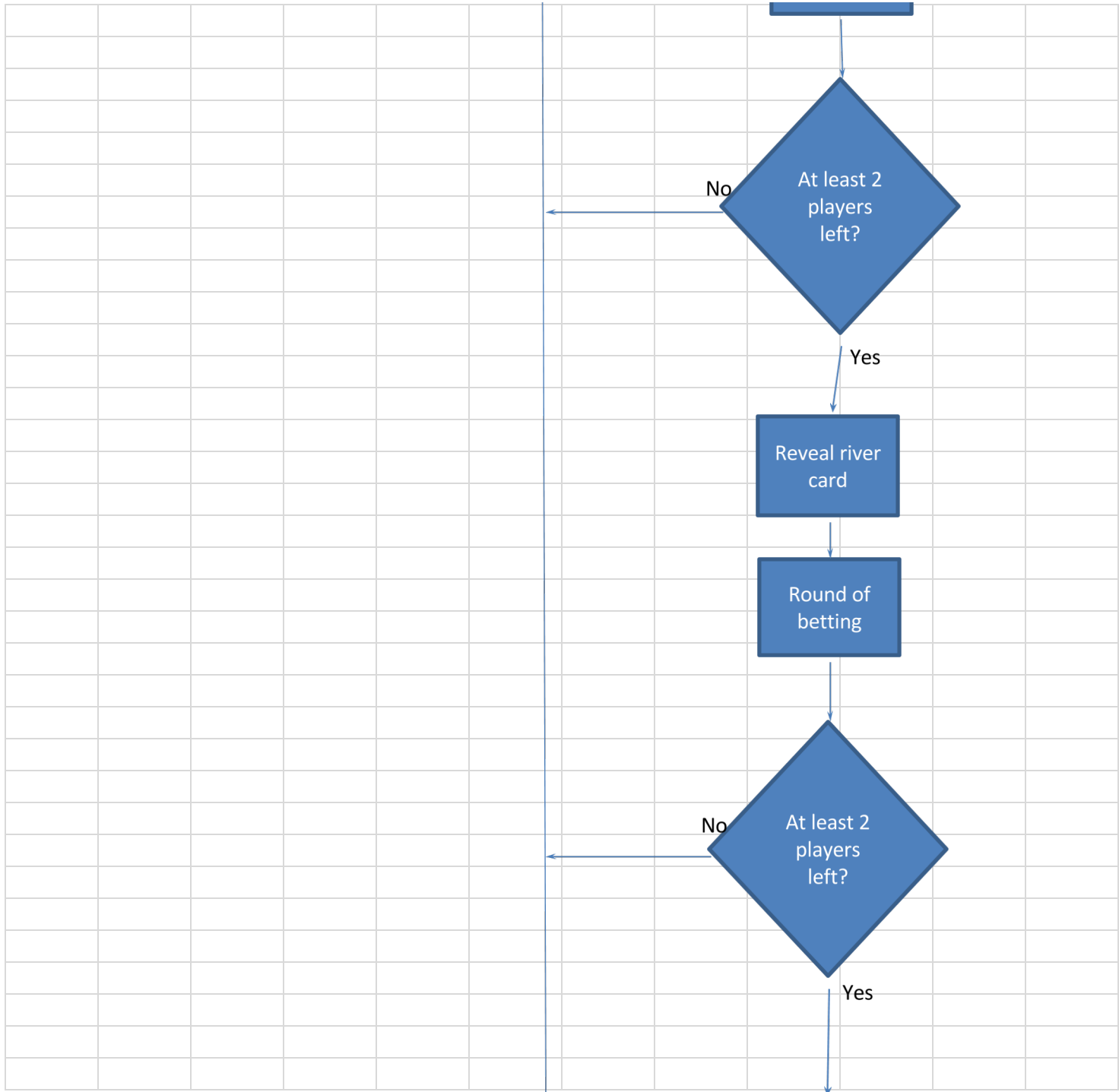At least 2 players left?

Yes → Reveal flop cards

No

Round of betting

At least 2 players left?

No

Yes

Reveal turn card

Round of betting

At least 2 players left?

No

Yes

Reveal river card

Round of betting

At least 2 players left?

No

Yes

```
        Evaluate
        remaining
        hands
            |
            v
        Distribute
        chips
            |
 v <--------+
            

Advance
Dealer
    |
    v
  Out
```
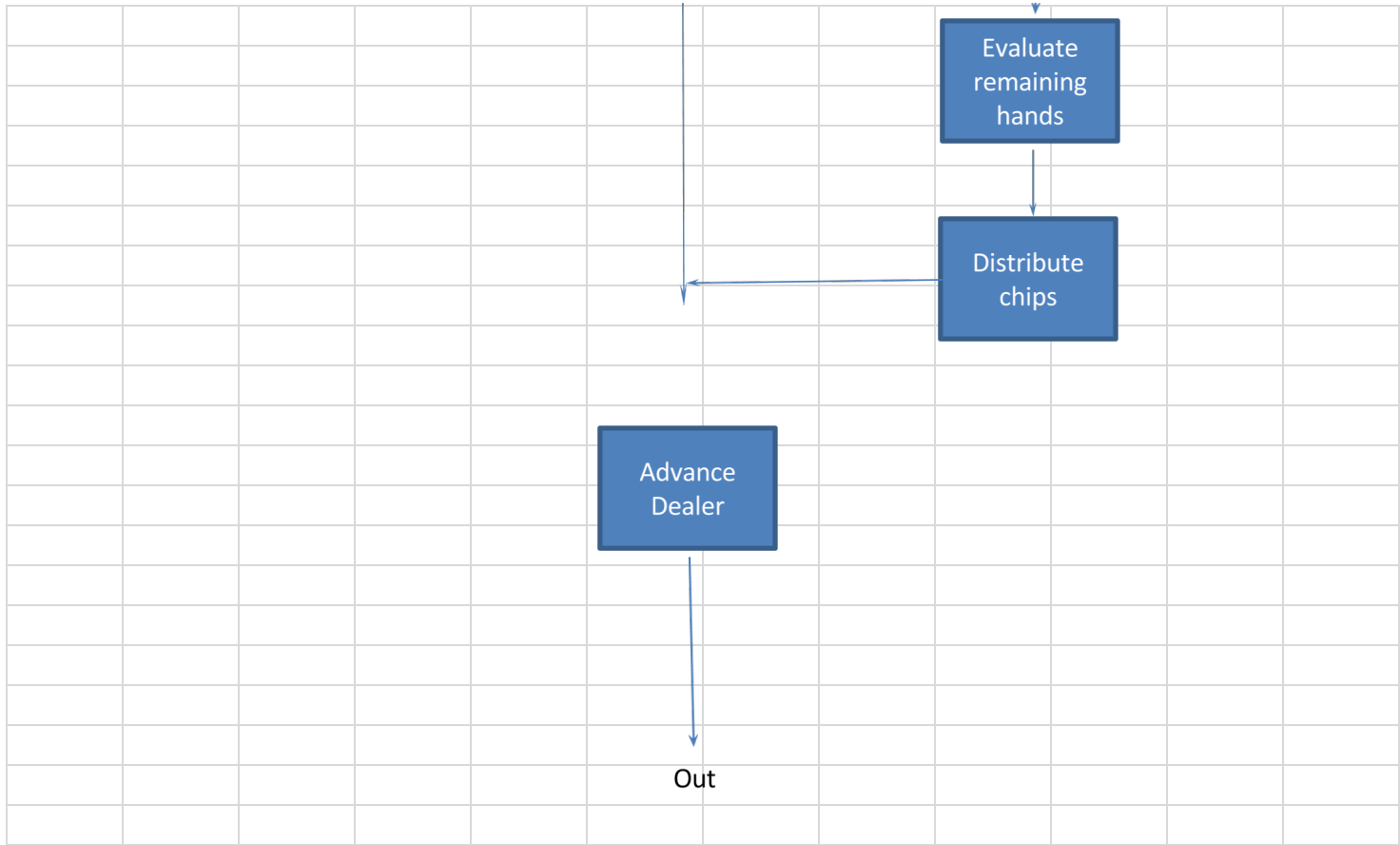
Data Structure Name	**Card**	(accepts an integer 0-51 as an argument)	
	data type	*data name*	*description*
	char	cardSuit	holds a suit identifier for the card. S for spades, H for hearts, D for diamonds, or C for clubs.
	integer	cardValue	holds a value of card 1=Ace, 2=2, 3=3,...11=Jack, 12=Queen, 13=King
	String	cardID	holds a display value for the card, i.e. AS = Ace of Spades, 10D = Ten of Diamonds, KC = King of Clubs
	function value type	*function name*	*description*
	char	getSuit	returns cardSuit
	integer	getValue	returns cardValue
	String	getID	returns cardID

Data Structure Name	**HoldCards**	(accepts 2 cards as arguments)	
	data type	*data name*	*description*
	card	card1	first of 2 hold cards
	card	card2	second of 2 hold cards
	function value type	*function name*	*description*
	card	getCard1	returns card1
	card	getCard2	returns card2

Data Structure Name	**Flop**	(accepts 3 cards as arguments)	
	data type	*data name*	*description*
	card	flop1	first of 3 flop cards
	card	flop2	second of 3 flop cards
	card	flop3	third of 3 flop cards
	boolean	revealed	identifies if flop cards have been revealed
	function value type	*function name*	*description*
	card	getFlop1	returns flop1
	card	getFlop2	returns flop2
	card	getFlop3	returns flop3
	null	setRevealed	sets revealed value
	boolean	getRevealed	returns revealed value

Data Structure Name	**Turn**	(accepts 1 card as an argument)	
	data type	*data name*	*description*
	card	turnCard	turn card

	boolean	revealed	identifies if the turn card has been revealed
	function value type	*function name*	*description*
	card	getTurn	returns turnCard
	null	setRevealed	sets revealed value
	boolean	getRevealed	returns revealed value
Data Structure Name	**River**	(accepts 1 card as an argument)	
	data type	data name	description
	card	riverCard	river card
	boolean	revealed	identifies if the river card has been revealed
	function value type	function name	description
	card	getRiver	returns riverCard
	null	setRevealed	sets revealed value
	boolean	getRevealed	returns revealed value
Data Structure Name	**Player**	(Accepts player name as argument)	
	data type	data name	description
	HoldCards	holdCards	The Player's two hold cards
	int	handStrength	holds a numerical representation of the value of hold cards at the current time. higher is better
	String	playerName	The player's name
	int	donatedToPot	value of chips this player has entered into current pot
	int	chipStack	value of chips in player's chip stack
	boolean	folded	set to true if player has folded in current hand
	boolean	dealer	set to true if this is current dealer
	function value type	function name	description
	string	getName	returns playerName
	HoldCards	getHoldCards	returns getHoldCards
	null	setHoldCards	sets holdCards
	int	getHandStrength	gets handStrength
	null	setHandStrength	sets handStrength
	int	getDonatedToPot	gets donatedToPot
	null	setDonatedToPot	sets donatedToPot
	int	getChipStack	gets chipStack
	null	setChipStack	sets chipStack
	boolean	getFolded	gets folded

	null	setFolded	sets folded value
Data Structure Name	**hand**	(accepts stack of players in order of action (dealer on bottom)	
	data type	data name	description
	int	pot	The amount of cash currently in the pot
	Flop	flop	The flop cards
	Turn	turn	The turn card
	River	river	The river card
	stack	players	stack of players that started this hand
	int	minRaise	current minRaise
	int	bigBlind	current bigBlind amount
	int	amtToCall	sum of total bets for this hand to call(sum of bigblind + all raises)
	function value type	function name	description
	int	getPot	returns pot
	null	setPot	sets pot
	Flop	getFlop	returns flop
	null	setFlop	sets flop
	Turn	getTurn	get turn card
	null	setTurn	set turn card
	River	getRiver	get reiver card
	null	setRiver	set river card
	null	revealFlop	set revealed flag of flop to true
	null	revealTurn	sets revealed flag of turn to true
	null	revealRiver	sets revealed flag of river to true
	null	advanceDealer	advances Dealer to next player on stack
	null	advanceStack	moves top player on stack to bottom position on stack

Start Game

Call, Raise, Fold

End Game

Player

```
                    ┌──────────┐
                    │  Start   │
                    └────┬─────┘
                         │
                         ▼
                    ┌──────────┐
                    │  Set up  │
                    │  game    │
                    └────┬─────┘
                         │
                         ▼
                    ┌──────────┐
                    │ Play Hand│
                    └────┬─────┘
                         │
                         │                                        No
                         │
                         ▼
                   ◇ Does Human player      Yes      ◇ Does Human
                     and at least 1 other  ────────►   player wish to
                     player have chips? ◇              quit? ◇
                         │                                    │
                         │ No                                 │ Yes
                         ▼                                    │
                   ◣ Does Human player
```

Start

Set up game

Play Hand

No

Does Human player and at least 1 other player have chips?

Yes

Does Human player wish to quit?

No

Yes

Does Human player

wish to restart?

Yes

No

Stop
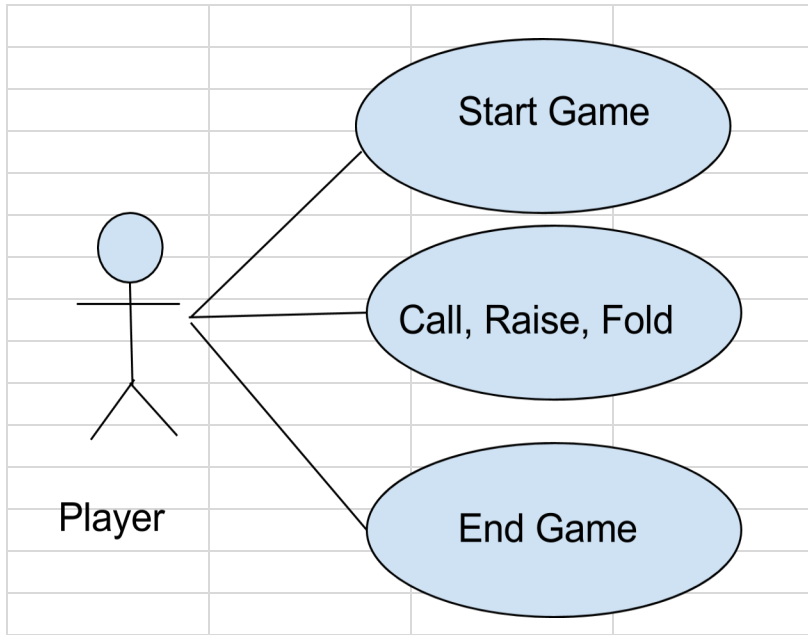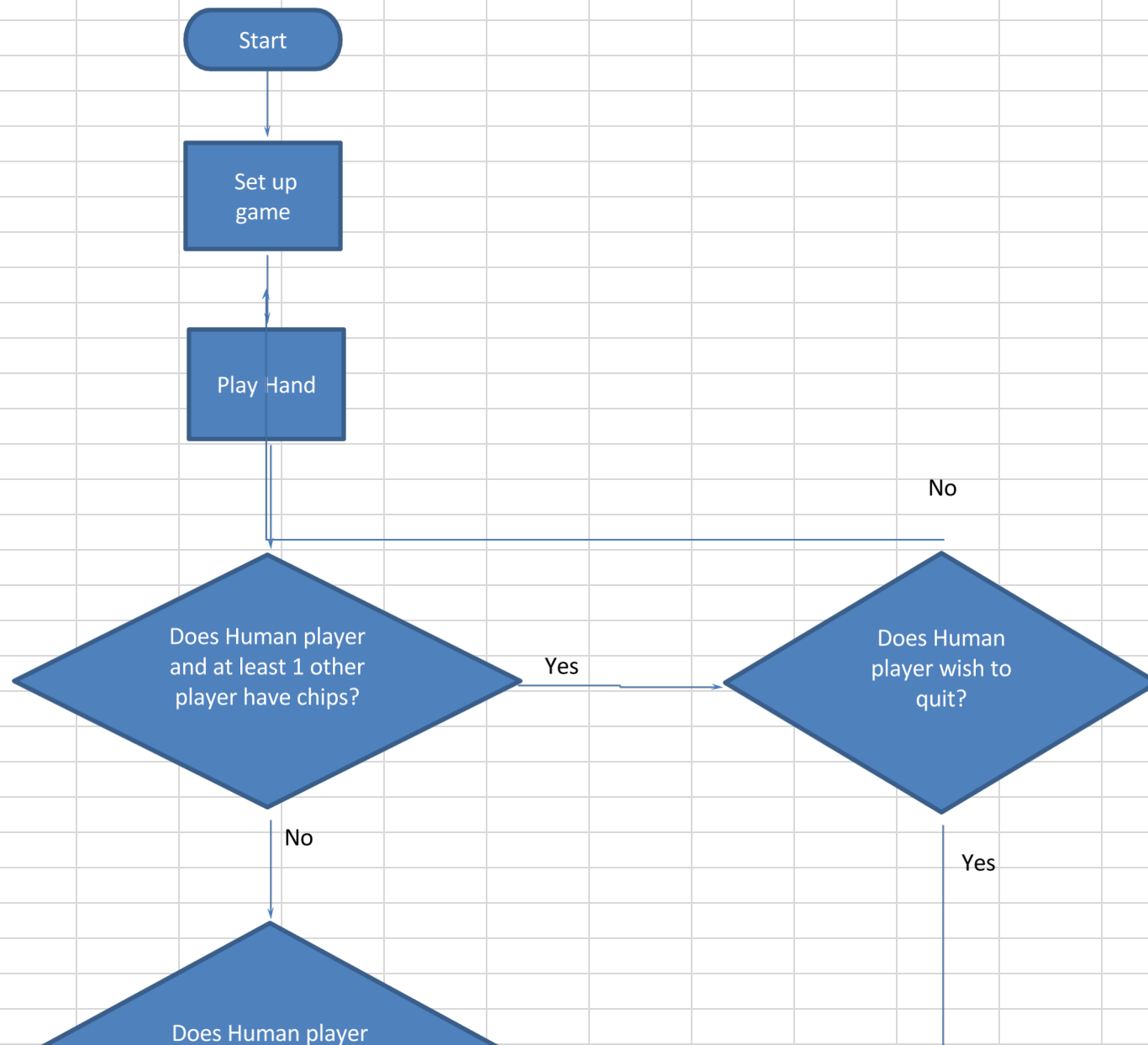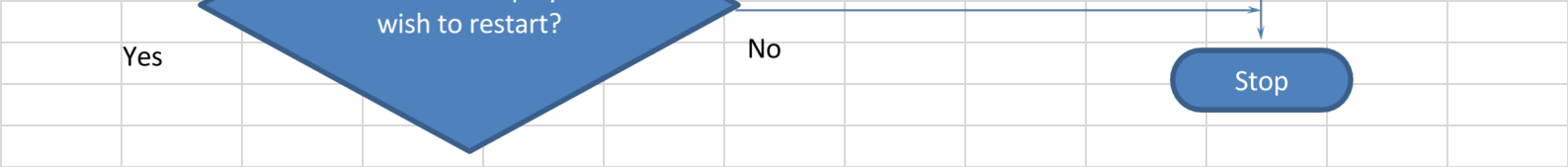
S

In

Customize game

Set up computer opponent(s)

Assign chips

Randomize player order

Determine Dealer

Out