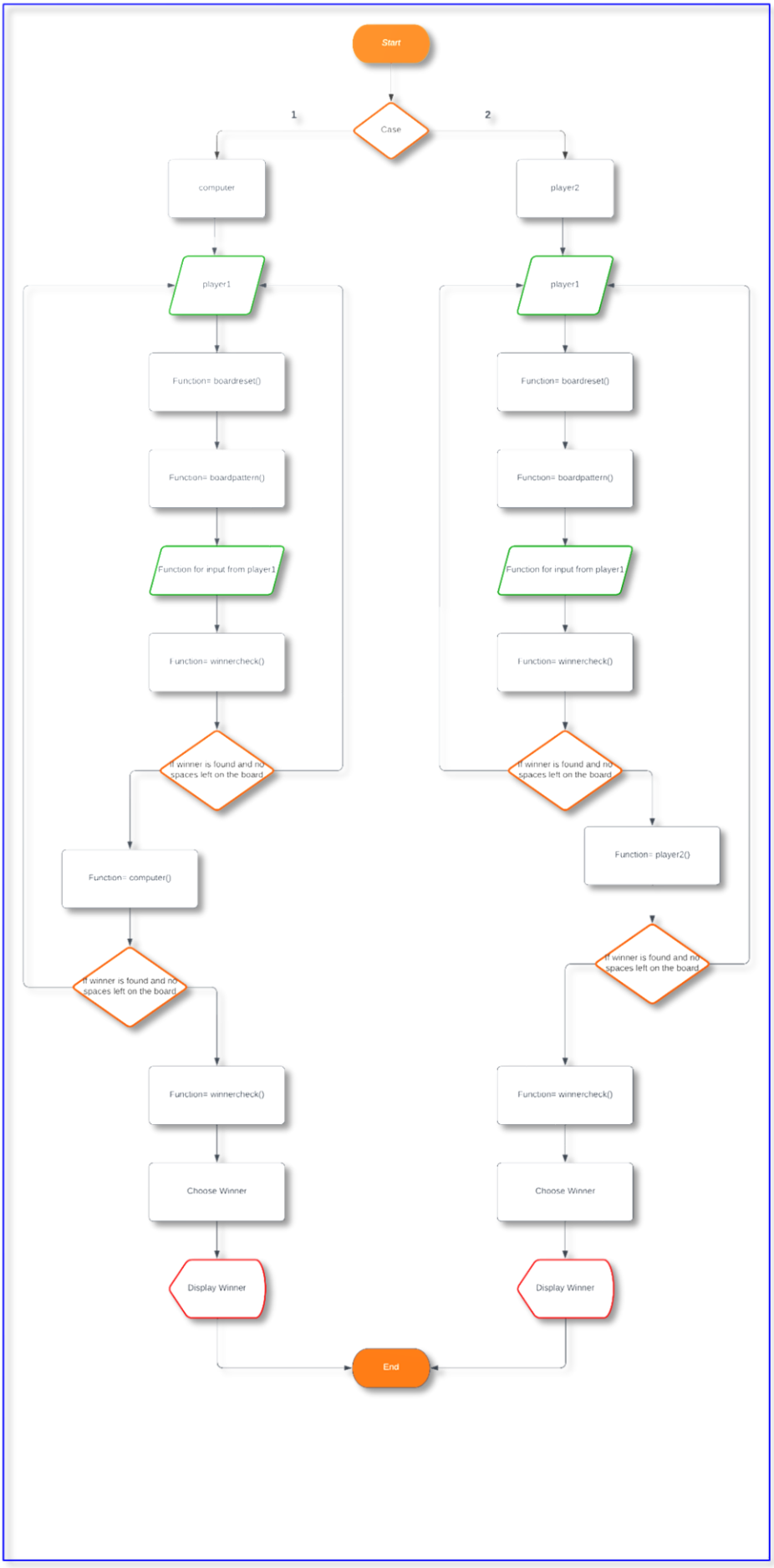
Term project
Report
Game: Tic Tac Toe

Flowchart:


Start
Case
1
2
computer
player2
player1
player1
Function= boardreset()
Function= boardreset()
Function= boardpattern()
Function= boardpattern()
Function for input from player1
Function for input from player1
Function= winnercheck()
Function= winnercheck()
If winner is found and no spaces left on the board
If winner is found and no spaces left on the board
Function= player2()
Function= computer()
If winner is found and no spaces left on the board
If winner is found and no spaces left on the board
Function= winnercheck()
Function= winnercheck()
Choose Winner
Choose Winner
Display Winner
Display Winner
End

Pseudocode:

1) Game starts
2) Player gets an option to play against the **computer** or **player2**.
3) The **player1** has to give “a” as an input to play against the **computer** or “b” to play against **player2**.
4) Case 1:
5) The user gives “a” as an inputs.
6) Call upon the **boardreset** function.
7) **While** (There are no winners and **openspaces** are zero)
8) Call **boardpattern** function.
9) Call player function.
10) This allows the player to make any move on the board.
11) We call the **winnercheck** function inside the winner variable.
12) After **player1** move **if** (winner does not equal to **openspaces** on the board or there's no **openspaces** left on the board)
13) Then **break** the loop}
14) **Else**, the **computer** makes a move.
15) Call **computer** function.
16) Again **if** (the winner does not equal to **openspaces** on the board or there's no **openspaces** left on the board)
17) {Break the loop}
18) We call the **boardpattern** function which can be used to print the last state of the board.
19) Then we call the **winnercheck** function to check who won the game.
20) Case 2:
21) We play against **player2.**
22) We call the **boardreset** function.
23) Then we create a loop which runs until there’s no **openspaces** left on the board or until a winner is decided.
24) Then we call the **boardpattern** function.
25) We call the **player1** function which allows the player1 to make a move.
26) Then we call the **winnercheck** function inside the winner variable.
27) **if** (After player1’s moves there are no winners and there are no more openspaces left)
28) Then **break** the loop.
29) Else we call the **player2** function which allows the player2 to make a move.
30) **If** (Again after player2’s moves there are no winners and there’s no more openspaces left)
31) {Break the loop}
32) Else we call **boardpattern** function which allows us to print last state of board.
33) Then we call the **winner** function which announces the winner.