## TIC TAC TOE GAME

## **Algorithm:**

- 1. Initialize an empty 3x3 board represented by a list of 9 spaces.
- 2. Define a function "print\_board()" that prints the current state of the board in the form of a 3x3 grid.
- 3. Define a function "player\_move(icon)" that prompts the current player to enter their move and updates the board with the player's icon.
- 4. Define a function "is\_victory(icon)" that checks if the current player has won the game by having their icon in all three spaces of a row, column, or diagonal.
- 5. Define a function "is\_draw()" that checks if the board is full and there is no winner.
- 6. Start a while loop that runs until the game is won or drawn.
- 7. Within the while loop, call the "print\_board()" function to display the current state of the board.
- 8. Call the "player\_move('X')" function for player 1 (X) to make their move.
- 9. Call the "is\_victory('X')" function to check if player 1 (X) has won. If so, print a message and exit the while loop.
- 10. Call the "is\_draw()" function to check if the game is a draw. If so, print a message and exit the while loop.
- 11. Call the "player\_move('O')" function for player 2 (O) to make their move.
- 12. Call the "is\_victory('O')" function to check if player 2 (O) has won. If so, print a message and exit the while loop.
- 13. Call the "is\_draw()" function to check if the game is a draw. If so, print a message and exit the while loop.
- 14. Repeat steps 7-13 until the game is won or drawn.