**All MIPS Assembly Language Modules Needed for Tic Tac Toe Program**

1. **.data** – contains the primary messages and the default game board array.

2. **continue** – Resumes the program flow after user and computer characters have been selected.

3. **comp** – sets the other available character option as the computer’s character so that there is no conflict between the user and computer’s selected characters.

4. **boardDisplay, Loop** – displays the updated game board with user’s and computer’s moves.

5. **isXorO** – Prints the character onto the board.

6. **checkRow1\_X, checkRow2\_X, checkRow3\_X, checkColumn1\_X, checkColumn2\_X, checkColumn3\_X, checkDiagonal1\_X, checkDiagonal2\_X, checkRow1\_O, checkRow2\_O, checkRow3\_O, checkColumn1\_O, checkColumn2\_O, checkColumn3\_O, checkDiagonal1\_O, and checkDiagonal2\_O** – checks if user has won the game by having three of their respective character in a row vertically, horizontally, or diagonally.

7. **checkRow1\_X\_comp, checkRow2\_X\_comp, checkRow3\_X\_comp, checkColumn1\_X\_comp, checkColumn2\_X\_comp, checkColumn3\_X\_comp, checkDiagonal1\_X\_comp, checkDiagonal2\_X\_comp, checkRow1\_O\_comp, checkRow2\_O\_comp, checkRow3\_O\_comp, checkColumn1\_O\_comp, checkColumn2\_O\_comp. checkColumn3\_O\_comp, checkDiagonal1\_O\_comp, checkDiagonal2\_O\_comp** – checks if computer has won the game by having three of its respective characters in a row vertically, horizontally, or diagonally.

8. **tie\_game, tie** – prints a tie game message.

9. **compMove** – handles computer’s moves.

10. **userMove** – handles user's moves.

11. **userWin** – displays the user winner message.

12. **compWin** – displays the computer winner message.

13. **turn** – handles the turn-based game logic.

14. **turnEndUser** – displays the board indicating the user as the winner.

15. **turnEndComp** – displays the board indicating the computer as the winner.

16. **end** – terminates the program.

17. **Else, skipDivider** – helps with placing dividers at the right places on the game board.

18. **checkWinUser** – verifies and confirms the user as the winner.

19. **checkWinComp** – verifies and confirms the computer as the winner.