Requirement 1

Connect4 (Bug/Omission list)

1. MyConnectFour.java: (Line Zero): This script does not include computer/ bot: Omission
Solution: Rewrite the code and add new class 'BotPlayer' to play with computer.
2. MyConnectFour.java: Line 4: class 'myconnectfour' ignored upper and lower case: Syntax error
Solution: Rewrite myconnectfour into MyConnectFour.
3. MyConnectFour.java: Line 10: from the board there should be 7 columns. While the board only consists of 6: Logical Error
Solution: Change ' new char [6][7] ' to ' new char[7][8] '.
4. MyConnectFour.java: Line 19: Missing semi-colon: Syntax Error
Solution: Add ' ; ' to the end of the line.
5. MyConnectFour.java: Line 19: " you want to drop (you) counter in" : Logical Error
Solution: Spelling correction form "you" to "your".
6. MyConnectFour.java: Line 24: While Loop only accounts for winning stage. Missing Condition of having a draw. Any game without a win will result in runtime error: Omission & Runtime error
Solution: Add a condition if the board is full or filled up, print a text "this game is a draw" to notify user.
7. MyConnectFour.java: Line 25 – 112: No code to check on winning the game in diagonal for both players: Logical Error
Solution: Add the code for checking on diagonal.
8. MyConnectFour.java: Line 26: getuserInput is case sensitive: Syntax Error
Solution: Rewrite ' getuserInput ' into ' getUserInput '.
9. MyConnectFour.java: Line 26: There is no code to check on illegal moves such as outside the given range and nothing to handle non integer values. (Runtime Error)
Solution: Write code to prompt user to re-enter if they have chosen any number outside the column range.
10. MyConnectFour.java: Line 28: placeCounter(' r ', userInput); userInput already parses into int move : Syntax error
Solution: replace ' userInput ' with ' move '.
11. MyConnectFour.java: Line 36 & 52: These lines checking if player 1 wins in horizontal or vertical has counter of more than 4, meaning player 1 requires 5 counters in a row instead of 4 to win the game. Logical Error
Solution: Change ' > ' to ' >= ' 4 or change ' > 4 ' to ' > 3 '.
12. MyConnectFour.java: Line 44 & 60: ' count = 0 ' reset for checking new row or column is missing: Logical error
Solution: Add ' count = 0; ' to line 44 & 60
13. MyConnectFour.java: Line 87 & 99: ' count = 0 ' is missing at horizontal and vertical. Player 2 can win the game without having 4 counter in a row: Logical Error
Solution: Add ' count = 0; ' to line 87 & 99.
14. MyConnectFour.java: Line 104: Missing semi-colon: Syntax Error
Solution: add ' ; ' to the end of the line, after printBoard().
15. MyConnectFour.java: Line 109: Message ' You Have Won!!! ' for player 2 will be prompted every time after player 2 place the counter. Logical Error
Solution: Move ' You Have Won!!! ' statement to line 107 below ' win = true; '.
16. MyConnectFour.java: Line 117: Missing semi-colon and additional variable on toReturn that has predefined in line 115: Syntax Error
Solution: Add ' ; ' after input.readLine() and remove data type String.
17. MyConnectFour.java: Line 126: Additional of semi-colon in for loop: Syntax Error
Solution: Remove semicolon after ' i++) '.
18. MyConnectFour.java: Line 127: Typo of baord as per array definition: Syntax Error
Solution: Rewrite into board.
19. MyConnectFour.java: Line 146: The counter should be placed from lowest to highest level of the board. Based on array. The highest level is defined as row zero while i++ is counting from the highest to lowest level. Runtime Error
Solution: Change ' i++ ' to ' i-- '.
20. MyConnectFour.java: Line 148, 151 & 152: the current position is 90 degree inverted to the board due to [j][i] array of the board and the position will start at 2 instead of 1 if the move is to insert in column 1: Logical Error

Solution: Switch ' [i][position] ' into ' [position – 1][i] ' .
21. MyConnectFour.java: Line 153: Typo of Boolean ' ture ': Syntax Error
    Solution: rewrite ture into true.
22. MyConnectFour.java: Line 161: Change assignment operator to equality operator: Syntax Error
    Solution: Provide ' == ' instead of ' = '.
23. MyConnectFour.java: Line 165: Missing semi-colon: Syntax Error
    Solution: Add ' ; ' to the end of the line after 'y'.