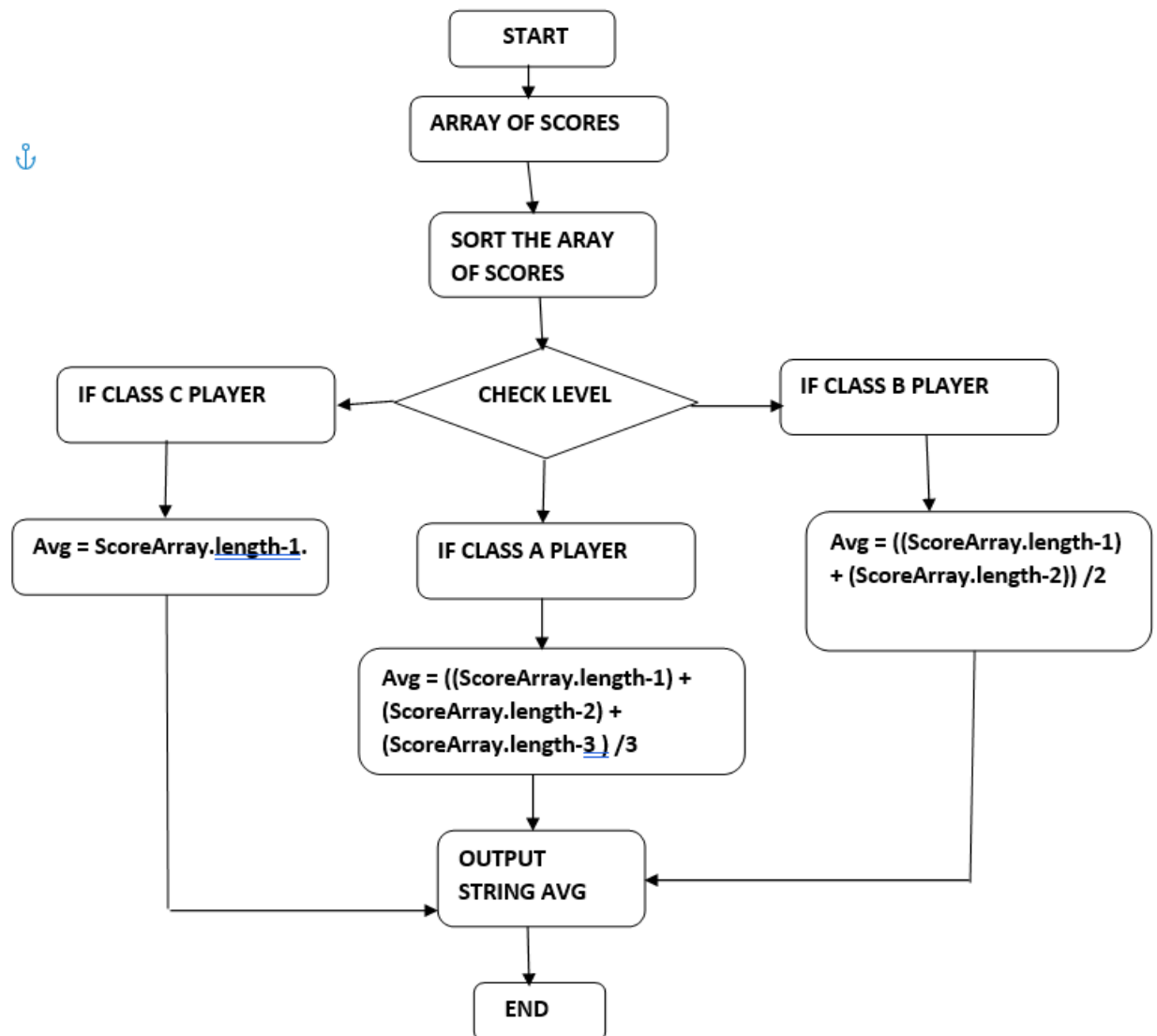


1. A) The extra Attribute I have chosen is Chess Player AGE and Chess Player Gender.  
B) The Overall score is calculated by Averaging the top n scores where n is the Class Stage (Class A, Class B, Class C) of the Chess Player  
The Logic is that the Incrementation of the overall scores for the Chess players in the lower level should be more compared to the players in the upper level.  
At first the array Scores are Sorted and then,  
If Class C: We consider the Highest value to calculate the avg.  
If Class B: We consider the top 2 Highest values to calculate avg.  
If Class A: We consider the top 3 Highest values to calculate avg.

The Activity Diagram is as follows:

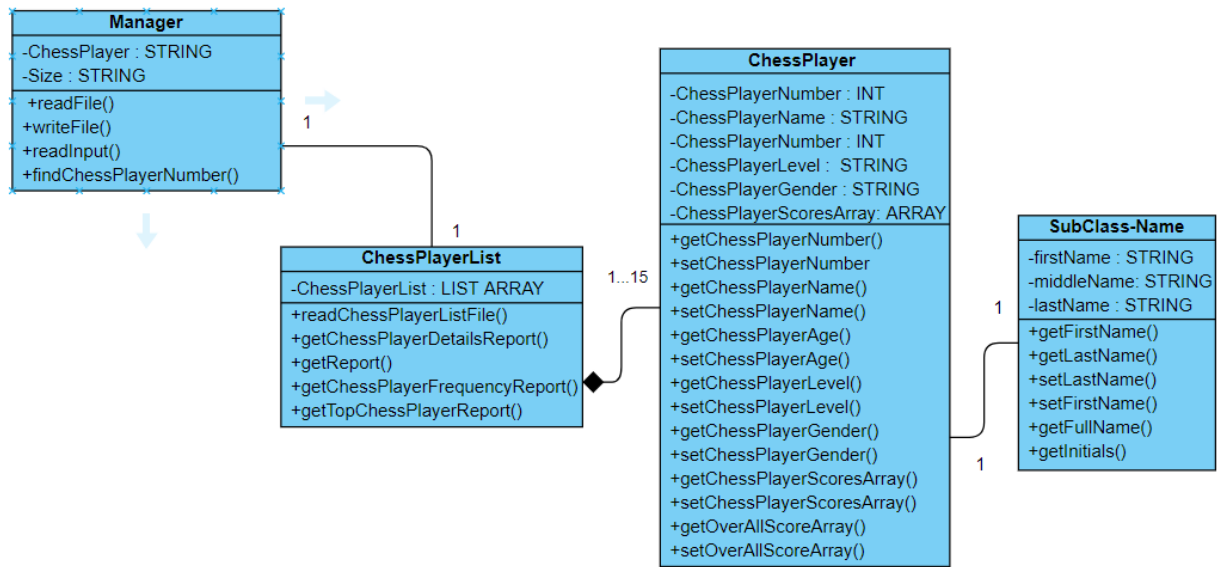


2. "The application meets the required specifications fully and the validation, User Interfacing is working perfectly by returning all the values".

**The test cases considered are as follows:**

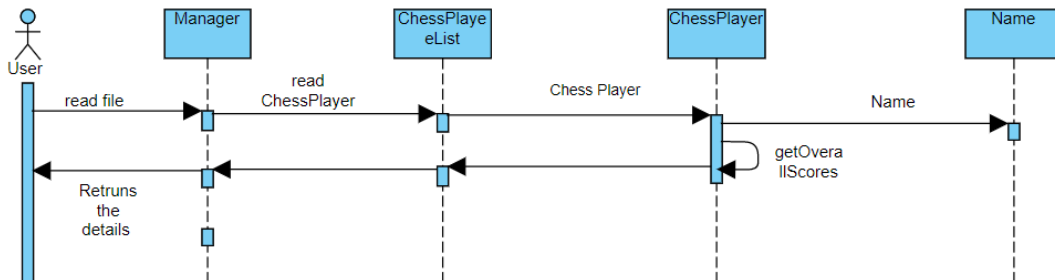
<u>Test Input values:</u>	<u>Output Values:</u>
<pre>System.out.println(chessPlayer.getChessPlayerNumber()); System.out.println(chessPlayer.getChessPlayerName().getFullName()); System.out.println(chessPlayer.getChessPlayerAge()); System.out.println(chessPlayer.getChessPlayerGender()); System.out.println(chessPlayer.getChessPlayerLevel()); System.out.println(chessPlayer.getFullDetails()); System.out.println(chessPlayer.getOverAllScoreArray()); System.out.println(chessPlayer.getShortDetails()); System.out.println();  int[] Points_2 = {4, 4, 4, 4, 4}; chessPlayer.setChessPlayerNumber(101); chessPlayer.setChessPlayerAge(30); chessPlayer.setChessPlayerGender("F"); chessPlayer.setChessPlayerLevel("Class C"); chessPlayer.setChessPlayerScoresArray(Points_2); chessPlayer.setChessPlayerName("Arunesh Shreyas");  ChessPlayerList chessPlayerList = new ChessPlayerList();     Manager manager = new Manager();      manager.readFile();     manager.writeFile();     manager.main();</pre>	<pre>100 Shreyas Arunesh 23 M Class A Shreyas Arunesh is an Chess player aged 23 having Cometitor number 100. Shreyas is a Class A player and has awarded with these scores : 0,2,3,4,5 This gives an Overall Score of 4.0. 4.0 CN 100 (SA) has overall score 4.0.  101 Arunesh Shreyas 30 F Class C Arunesh Shreyas is an Chess player aged 30 having Cometitor number 101. Arunesh is a Class C player and has awarded with these scores : 4,4,4,4,4 This gives an Overall Score of 4.0. 4.0 CN 101 (AS) has overall score 4.0.</pre>

### 3. A. Activity Diagram

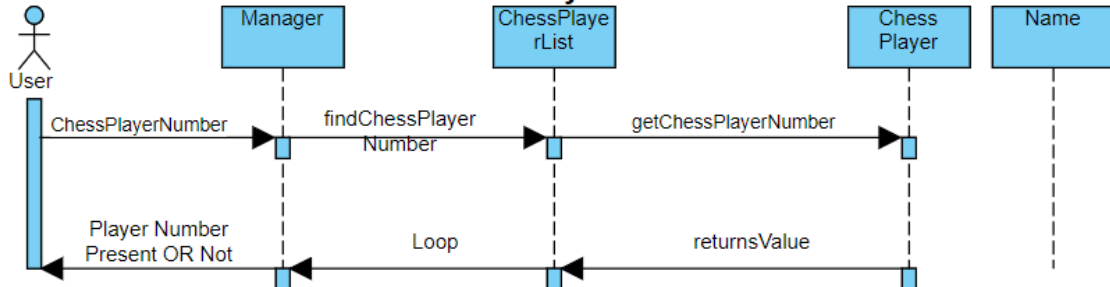


### B Sequence Diagrams

Sequence Diagram to Read the Complete Report



Sequence Diagram to find the ChessPlayerNumber



Sequence Diagram to Generate a Report to an output file

