

Assignment 4

Total Marks=20

1. You are required to design a Java program for a Cricket Team Management System. The system should manage Coaches and their Players. [Marks=Object Creation=5+Menu Creation =8+ Test Cases Success=5+ Clean Coding=2=20]

Coach
-name : String
-coachId: String
<<constructor>>Coach() + toString(): String (It returns coach details in a readable format)

Player
-name : String
-jersyNo: int
-battingAverage: double
-coach: Coach
-role: String (Batsman, Bowler, All-Rounder, Wicket-Keeper)
-teamCode: int (static variable, common for all the players)
<<constructor>>Player()
<<constructor>>Player(Coach) (creates a player with an assigned coach)
+updatePlayerRecord() : void – updates performance stats like average or role.
+getPlayerDetails() : void – displays complete player info.
+getCoach() : Coach – returns the coach assigned to the player.

The Java program should support the following menu options. First, create Coach objects and then create Players. The maximum allowable limit for Coach and Players are 2 and 5, respectively. If you violate this rule, an error message should be thrown and should not allow object creation. The menu should have the following options.

- Add Player
- Delete Player
- Add Coach
- Delete Coach
- Update Player
- Update Coach
- Display Player details
- Display Coach details (of a particular player)