| **Solution Set#A** | |
| --- | --- |
| **public class SchoolFair {**  **String schoolName;**  **int class9, class10;**  **void addStudent(String cls, int count) {**  **if (cls.equals("class 9")) {**  **class9 += count;**  **System.out.println(count + " students joined " + cls);**  **} else if (cls.equals("class 10")) {**  **class10 += count;**  **System.out.println(count + " students joined " + cls);**  **} else {**  **System.out.println("Only allowed to add class 9 and 10 students");**  **}**  **}**  **int getGroups(String event) {**  **int d = 1;**  **if (event.equals("Science Project"))**  **d = 4;**  **else if (event.equals("Quiz Show"))**  **d = 2;**  **System.out.println("In the " + event + ",");**  **System.out.println(class9 / d + " groups are from class 9");**  **System.out.println(class10 / d + " groups are from class 10");**  **return class9 / d + class10 / d;**  **}**  **void allDetails() {**  **System.out.println("School name: " + schoolName);**  **System.out.println("Students counts:");**  **System.out.print("Class 9: " + class9 + ", ");**  **System.out.println("Class 10: " + class10);**  **}**  **}** | |
| Class name and method declarations | **1** |
| Proper Instance Variables | **1.5** |
| addStudent():  → [1.5] three branches  → [0.5] String comparison (.equals, not ==)  → [1.0] Print statements | **3** |
| getGroups():  → [1] String comparison, branching statements  → [1] Print after division  → [1] Return sum | **3** |
| allDetails():  → [1.5] Formatted print statements | **1.5** |
| **TOTAL** | **10** |

| **Solution Set#B** | |
| --- | --- |
| **public class Tournament {**  **String tournament;**  **int under19, professional;**  **void registerPlayers(String category, int count) {**  **if (category.equals("Under-19")) {**  **under19 += count;**  **System.out.println(count + " players registered in " + category);**  **} else if (category.equals("Professional")) {**  **professional += count;**  **System.out.println(count + " players registered in " + category);**  **} else {**  **System.out.println("Only allowed to register Under-19, Professional categories");**  **}**  **}**  **int getTeams(String sport) {**  **int teamSize = 1;**  **if (sport.equals("Football"))**  **teamSize = 11;**  **else if (sport.equals("Basketball"))**  **teamSize = 5;**  **System.out.println("In " + sport + ":");**  **System.out.println(under19 / teamSize + " teams in Under-19");**  **System.out.println(professional / teamSize + " teams in Professional");**  **return under19 / teamSize + professional / teamSize;**  **}**  **void showSummary() {**  **System.out.println("Tournament name: " + tournament);**  **System.out.println("Player counts:");**  **System.out.print("Under-19: " + under19 + ", ");**  **System.out.println("Professional: " + professional);**  **}**  **}** | |
| Class name and method declarations | **1** |
| Proper Instance Variables | **1.5** |
| registerPlayers():  → [1.5] three branches  → [0.5] String comparison (.equals, not ==)  → [1.0] Print statements | **3** |
| getTeams():  → [1] String comparison, branching statements  → [1] Print after division  → [1] Return sum | **3** |
| showSummary():  → [1.5] Formatted print statements | **1.5** |
| **TOTAL** | **10** |