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| **Ahsanullah University of Science and Technology**  **Course Title: Object-Oriented Programming Lab**  **Course Number: CSE1206**  **Spring 2020** |

**Online: 2 Date: 3rd January 2021 Group: B1 Time: 20 minutes**

**Marks**

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| 1. Create a Java Project Named **GamerDemo**. Inside the same package (folder) create a new class **Gamer**.   There should be two classes: **GamerDemo** [which has the main method]  **Gamer** | **1** |
| 1. Inside the **Gamer** class declare **3** **public** variables. The datatypes are given inside the bracket:   **gamerType (String), totalScore (double), totalMatches (double).** | **1** |
| 1. Declare **2** Constructorsin **Gamer Class:**     1. A constructor that takes no parameters and initializes the variables as:   **gamerType** = null  **totalScore** = -1.0  **totalMatches** = -1.0   * 1. Another Constructor which takes all the variables as parameters and assigns those parameters to the class variables. | **1+2** |
| 1. In **Gamer** Class declare a method called **calculateFinalScore()** that returns a **double** value and takes no parameters. The method calculates the final score according to the following way-   If **gamerType** is equal to the String **“noob”** then use the formula ***2\*totalScore\*totalMatches/(totalScore+totalMatches)***  Otherwise return **totalScore/totalMatches**  **For example**:  if totalScore = 60, totalMatches = 80 and gamerType = “noob” , then  finalScore = 2\*60\*80/60+80 = 68.57142857142857 | **3** |
| 1. Now print the **gamerType, totalScore and totalMatches** in the main method inside the **GamerDemo** class. Also print the final score by calling the method **calculateFinalScore()** of the Gamer class in the main method. | **2** |

**Total: 10**

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| Sample Output |
| Type of Gamer : professional  Total Score : 60.0  Total Matches : 80.0  Mean Score : 0.75 |