

# Rajalakshmi Engineering College

Name: Spurgen A  
Email: 241001257@rajalakshmi.edu.in  
Roll no: 241001257  
Phone: 9361494540  
Branch: REC  
Department: IT - Section 2  
Batch: 2028  
Degree: B.E - IT

Scan to verify results



## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 5\_Q5

Attempt : 1  
Total Mark : 10  
Marks Obtained : 10

#### **Section 1 : Coding**

##### **1. Problem Statement**

Ram is working as a developer for BrightEdu Coaching Center, which wants to build a student fee management system.

Each student's enrollment has:

An Enrollment ID (integer)A Student Name (string)The Number of Subjects (integer)

The fee calculation rules are:

Registration Fee = 1000 units (flat for every student). Per Subject Fee = 800 units. If the student enrolls in more than 5 subjects, a 20% scholarship (discount) is applied on the total fee.

Ram has been asked to implement this system using:

A class with attributes for student details. A constructor to initialize student details. Setter methods to update details if needed. Getter methods to retrieve details. Objects of the class to represent student enrollments.

Finally, display each student's details and final fee.

#### ***Input Format***

The first line of input contains an integer N, representing the number of students.

For each student:

- The next line contains the Enrollment ID (integer).
- The following line contains the student's name (string).
- The next line contains the Number of subjects (integer).

#### ***Output Format***

For each student, print the details in the following format:

- Enrollment ID: <enrollment\_id>
- Student Name: <student\_name>
- Final Fee: <final\_fee> (rounded to one decimal place)

Refer to the sample output for formatting specifications.

#### ***Sample Test Case***

Input: 1

1234

Ravi Kumar

3

Output: Enrollment ID: 1234

Student Name: Ravi Kumar

Final Fee: 3400.0

#### ***Answer***

```
// You are using Java  
import java.util.Scanner;
```

```
class Student {
```

```
int enrollmentId;
String studentName;
int numSubjects;

// Constructor
Student(int id, String name, int subjects) {
    enrollmentId = id;
    studentName = name;
    numSubjects = subjects;
}

// Method to calculate final fee
double calculateFee() {
    double fee = 1000 + (numSubjects * 800); // registration + subjects

    // Apply 20% scholarship if more than 5 subjects
    if (numSubjects > 5) {
        fee = fee - (fee * 0.20);
    }

    return fee;
}

// Display student details
void display() {
    double finalFee = calculateFee();
    System.out.println("Enrollment ID: " + enrollmentId);
    System.out.println("Student Name: " + studentName);
    System.out.println("Final Fee: " + String.format("%.1f", finalFee));
}

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int N = sc.nextInt(); // number of students
        sc.nextLine(); // consume newline

        for (int i = 0; i < N; i++) {
            int id = sc.nextInt(); // enrollment ID
            sc.nextLine(); // consume newline
```

```
String name = sc.nextLine(); // student name  
int subjects = sc.nextInt(); // number of subjects  
  
// create student object  
Student s = new Student(id, name, subjects);  
  
// show student details  
s.display();  
}  
  
sc.close();  
}  
}
```

**Status : Correct**

**Marks : 10/10**