# Rajalakshmi Engineering College

Name: SHREYA  AMUDHU.N.R
Email: 240701505@rajalakshmi.edu.in
Roll no: 2116240701505
Phone: 9042904845
Branch: REC
Department: CSE - Section 9
Batch: 2028
Degree: B.E - CSE

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.*;
class Student {
    int enrollmentId;
```

```
String studentName;
int numSubjects;
public Student(int enrollmentId, String studentName, int numSubjects) {
    this.enrollmentId = enrollmentId;
    this.studentName = studentName;
    this.numSubjects = numSubjects;
}

// Setter methods
public void setEnrollmentId(int enrollmentId) {
    this.enrollmentId = enrollmentId;
}

public void setStudentName(String studentName) {
    this.studentName = studentName;
}

public void setNumSubjects(int numSubjects) {
    this.numSubjects = numSubjects;
}

// Getter methods
public int getEnrollmentId() {
    return enrollmentId;
}

public String getStudentName() {
    return studentName;
}

public int getNumSubjects() {
    return numSubjects;
}

// Fee calculation
public double calculateFee() {
    double registrationFee = 1000;
    double perSubjectFee = 800 * numSubjects;
    double totalFee = registrationFee + perSubjectFee;

    if (numSubjects > 5) {
        totalFee = totalFee * 0.8; // Apply 20% discount
```

```
        }
        return totalFee;
    }
}

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

        int N = Integer.parseInt(sc.nextLine()); // number of students

        for (int i = 0; i < N; i++) {
            int enrollmentId = Integer.parseInt(sc.nextLine());
            String studentName = sc.nextLine();
            int numSubjects = Integer.parseInt(sc.nextLine());

            Student student = new Student(enrollmentId, studentName,
numSubjects);

            System.out.println("Enrollment ID: " + student.getEnrollmentId());
            System.out.println("Student Name: " + student.getStudentName());
            System.out.printf("Final Fee: %.1f%n", student.calculateFee());
        }

        sc.close();
    }
}
```

***Status :*** Correct ***Marks : 10/10***