

Experiment No: 3

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Roll No: 37

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Code :-

Person.java

```
public class Person {  
    String name;  
    int age;  
  
    void setPersonDetails(String n, int a) {  
        name = n;  
        age = a;  
    }  
  
    void displayPersonDetails() {  
        System.out.println("Name: " + name);  
        System.out.println("Age: " + age);  
    }  
}
```

Administrator.java

```
public class Administrator extends Person{
    String department;
    void setAdministratorDetails(String n, int a, String d) {
        setPersonDetails(n, a);
        department = d;
    }
    void displayAdministratorDetails() {
        displayPersonDetails();
        System.out.println("Department: " + department);
    }
}
```

GraduateStudent.java

```
public class GraduateStudent extends Student {
    int graduationYear;
    void setGraduateStudentDetails(String n, int a, String c, int r, int y)
    {
        setStudentDetails(n, a, c, r);
        graduationYear = y;
    }
    void displayGraduateStudentDetails() {
        displayStudentDetails();
        System.out.println("Graduation Year: " + graduationYear);
    }
}
```

Student.java

```
public class Student extends Person {
    String course;
    int rollNumber;

    void setStudentDetails(String n, int a, String c, int r) {
        setPersonDetails(n, a);
        course = c;
        rollNumber = r;
    }

    void displayStudentDetails() {
        displayPersonDetails();
        System.out.println("Course: " + course);
        System.out.println("Roll Number: " + rollNumber);
    }
}
```

Teacher.java

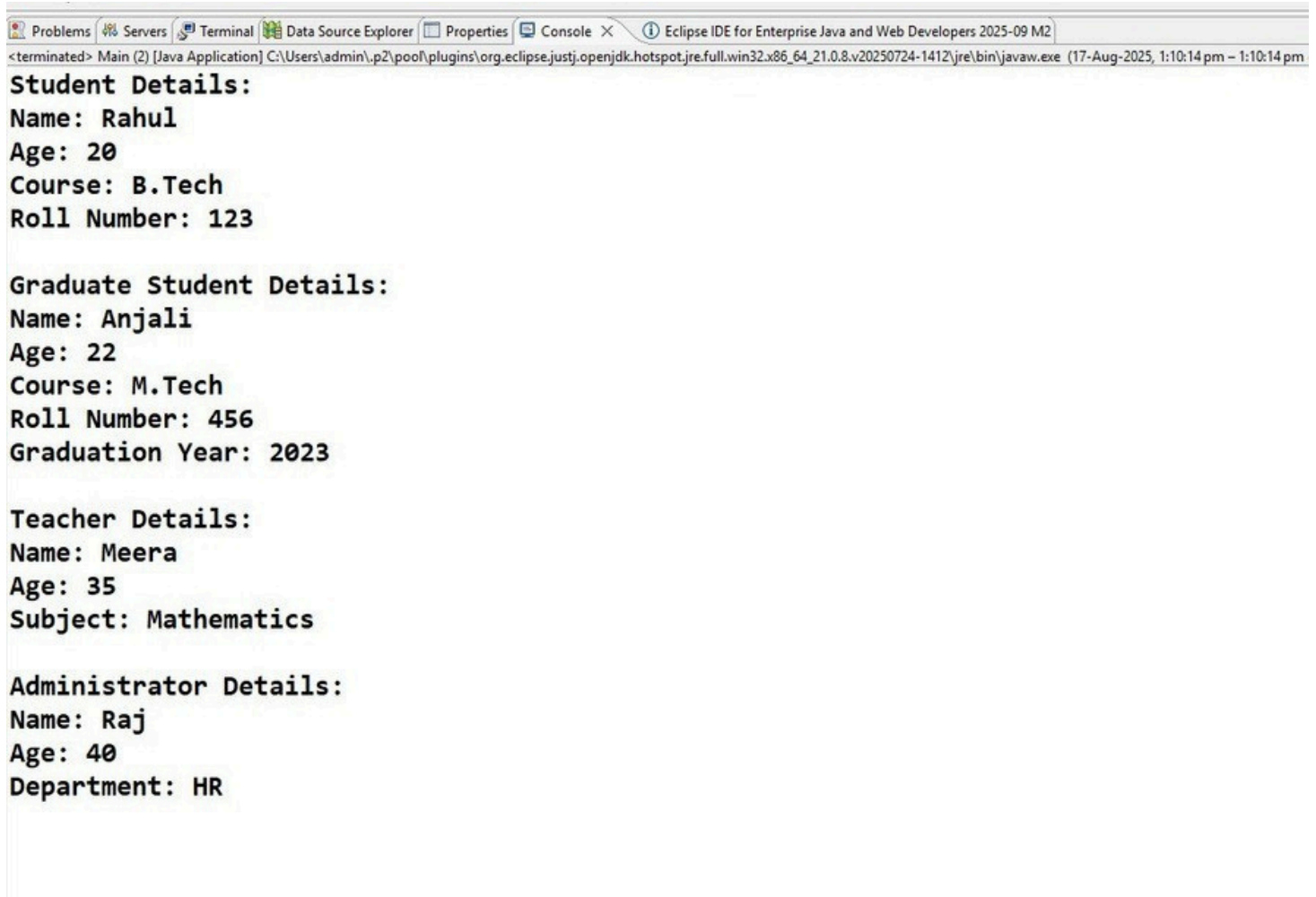
```
public class Teacher extends Person{
    String subject;
    void setTeacherDetails(String n, int a, String s) {
        setPersonDetails(n, a);
        subject = s;
    }

    void displayTeacherDetails() {
        displayPersonDetails();
        System.out.println("Subject: " + subject);
    }
}
```

Main.java

```
public class Main {  
    public static void main(String[] args) {  
  
        Student s = new Student();  
s.setStudentDetails("Rahul", 20, "B.Tech", 123);  
System.out.println("Student Details:");  
s.displayStudentDetails();  
System.out.println();  
  
        GraduateStudent gs = new GraduateStudent();  
gs.setGraduateStudentDetails("Anjali",22,"M.Tech",456, 2023);  
System.out.println("Graduate Student Details:");  
gs.displayGraduateStudentDetails();  
System.out.println();  
        Teacher t = new Teacher();  
t.setTeacherDetails("Meera", 35, "Mathematics");  
System.out.println("Teacher Details:");  
t.displayTeacherDetails();  
System.out.println();  
  
        Administrator a = new Administrator();  
a.setAdministratorDetails("Raj", 40, "HR");  
System.out.println("Administrator Details:");  
a.displayAdministratorDetails();  
    }  
}
```

Output:-



```
<terminated> Main (2) [Java Application] C:\Users\admin\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.8.v20250724-1412\jre\bin\javaw.exe (17-Aug-2025, 1:10:14 pm - 1:10:14 pm)

Student Details:
Name: Rahul
Age: 20
Course: B.Tech
Roll Number: 123

Graduate Student Details:
Name: Anjali
Age: 22
Course: M.Tech
Roll Number: 456
Graduation Year: 2023

Teacher Details:
Name: Meera
Age: 35
Subject: Mathematics

Administrator Details:
Name: Raj
Age: 40
Department: HR
```