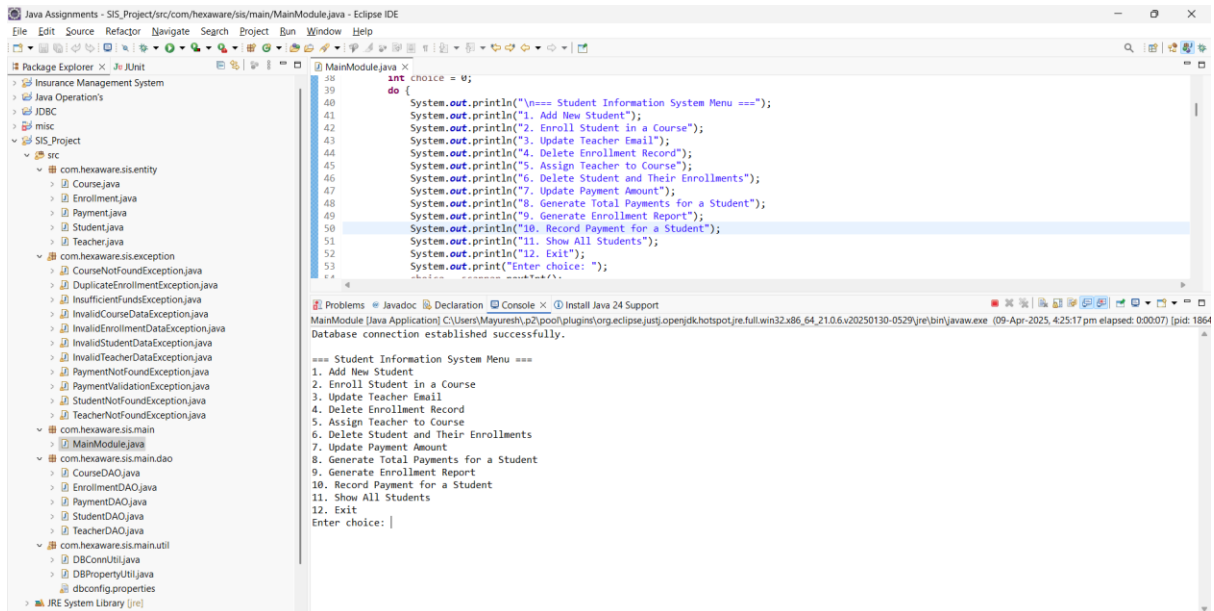


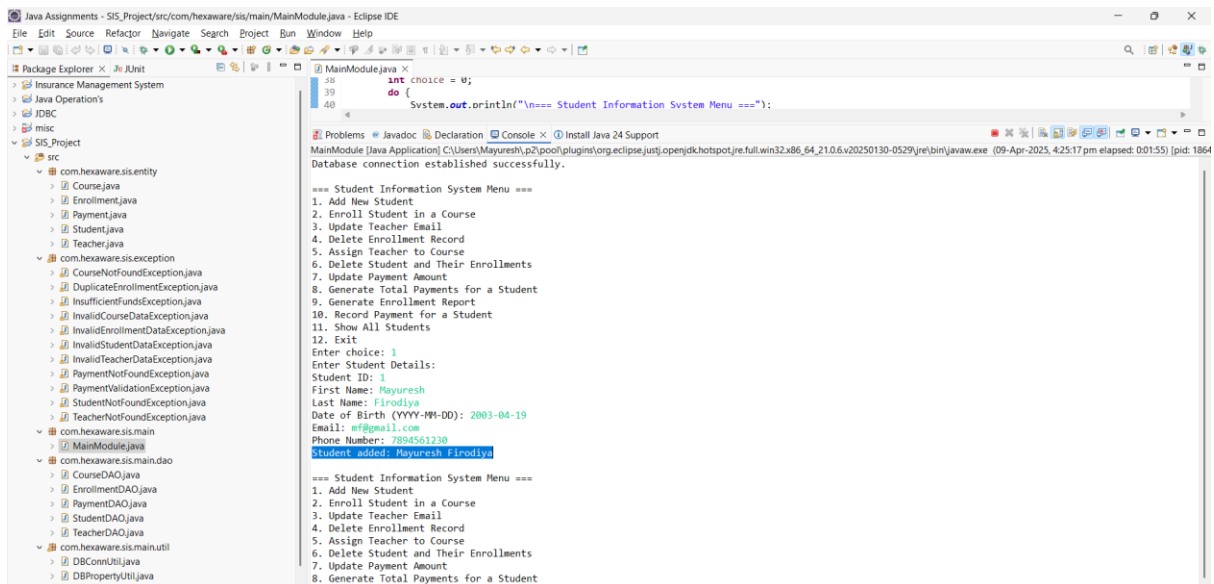
Student Information System

Output Screenshot's

1. Add New Student to the System



2. Enroll Student in a Course



3. Update Teacher Email

The screenshot displays an IDE environment with the following components:

- Package Explorer (Left):** Shows the project structure for 'sis'. The 'com.hexaware.sis' package contains:
 - Course.java
 - Enrollment.java
 - Payment.java
 - Student.java
 - Teacher.java
 - com.hexaware.sis.exception: CourseNotFoundException.java, DuplicateEnrollmentException.java, InsufficientFundsException.java, InvalidCourseDataException.java, InvalidEnrollmentDataException.java, InvalidStudentDataException.java, InvalidTeacherDataException.java, PaymentNotFoundException.java, PaymentValidationException.java, StudentNotFoundException.java, TeacherNotFoundException.java
 - com.hexaware.sis.main: MainModule.java
 - com.hexaware.sis.main.dao: CourseDAO.java, EnrollmentDAO.java, PaymentDAO.java, StudentDAO.java, TeacherDAO.java
 - com.hexaware.sis.main.util: DBConnUtil.java, DBPropertyUtil.java, dbconfig.properties
- MainModule.java (Center):** Contains the main logic for the student information system menu. It includes a menu display, a loop for user choices, and methods for adding students, enrolling students, and updating teacher information.


```

MainModule.java
38      int choice = 0;
39      do {
40          System.out.println("== Student Information System Menu ==");
          ...
          case 1: addNewStudent();
          case 2: enrollStudent();
          case 3: updateTeacherEmail();
          case 4: deleteEnrollmentRecord();
          case 5: assignTeacherToCourse();
          case 6: deleteStudentAndEnrollments();
          case 7: updatePaymentAmount();
          case 8: generateTotalPayments();
          case 9: generateEnrollmentReport();
          case 10: recordPayment();
          case 11: showAllStudents();
          case 12: exit();
          ...
      } while (choice != 0);
      ...
  
```
- Console (Right):** Shows the output of the program execution.


```

MainModule [Java Application] C:\Users\Mayuresh\p2\pool\plugins\org.eclipse.justopenjdk.hotspot.jre.full.win32.x86_64_21.0.6.20250130-0529\jre\bin\java.exe (09-Apr-2025, 4:25:17 pm elapsed: 0:02:31) [pid: 1864]
Date of Birth (YYYY-MM-DD): 2083-04-19
Email: mfgmail.com
Phone Number: 7894561230
Student added: Mayuresh Firodiya

== Student Information System Menu ==
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
Enter choice: 2
Enter Student ID: 1
Enter Course ID: 2
Enter Enrollment Date (YYYY-MM-DD): 2025-04-09
Mayuresh Firodiya enrolled in course 6998
Enrollment added successfully.
Enrollment successful!

== Student Information System Menu ==
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
  
```

4. Delete Enrollment Record

The screenshot displays the Eclipse IDE interface. The Package Explorer on the left shows the project structure for 'sis'. The MainModule.java file is open in the editor, showing a menu-driven application. The Console on the right shows the output of the application, including the menu display and user input for adding a new student.

Package Explorer:

- sis
 - src
 - com.hexaware.sis.entity
 - Course.java
 - Enrollment.java
 - Payment.java
 - Student.java
 - Teacher.java
 - com.hexaware.sis.exception
 - CourseNotFoundException.java
 - DuplicateEnrollmentException.java
 - InsufficientFundsException.java
 - InvalidCourseDataException.java
 - InvalidEnrollmentDataException.java
 - InvalidStudentDataException.java
 - InvalidTeacherDataException.java
 - PaymentNotFoundException.java
 - PaymentValidationException.java
 - StudentNotFoundException.java
 - TeacherNotFoundException.java
 - com.hexaware.sis.main
 - MainModule.java
 - com.hexaware.sis.main.dao
 - CourseDAO.java
 - EnrollmentDAO.java
 - PaymentDAO.java
 - StudentDAO.java
 - TeacherDAO.java
 - com.hexaware.sis.main.util
 - DBConnUtil.java
 - DBPropertiesUtil.java
 - dbconfig.properties

MainModule.java:

```

1  ant choice = w;
2  do {
3      System.out.println("==== Student Information System Menu ===");
4
5      MainModule [Java Application] C:\Users\mayuresh.pz\poo\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-0529\net\bin\javaw.exe (09-Apr-2025, 4:25:17 pm elapsed: 0:03:29) [pid: 1864]
6      Enrollment added successfully.
7      Enrollment successful!
8
9      ==== Student Information System Menu ====
10     1. Add New Student
11     2. Enroll Student in a Course
12     3. Update Teacher Email
13     4. Delete Enrollment Record
14     5. Assign Teacher to Course
15     6. Delete Student and Their Enrollments
16     7. Update Payment Amount
17     8. Generate Total Payments for a Student
18     9. Generate Enrollment Report
19     10. Record Payment for a Student
20     11. Show All Students
21     12. Exit
22     Enter choice: 3
23     Enter Teacher ID: 1
24     Enter new Email: asha.kulkarni@mituniversity.edu.in
25     Teacher updated: Dr. Asha Kulkarni
26     Teacher email updated in the database.
27
28     ==== Student Information System Menu ====
29     1. Add New Student
30     2. Enroll Student in a Course
31     3. Update Teacher Email
32     4. Delete Enrollment Record
33     5. Assign Teacher to Course
34     6. Delete Student and Their Enrollments
35     7. Update Payment Amount
36     8. Generate Total Payments for a Student
37     9. Generate Enrollment Report
38     10. Record Payment for a Student
39     11. Show All Students
40     12. Exit

```

Console:

```

MainModule [Java Application] C:\Users\mayuresh.pz\poo\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-0529\net\bin\javaw.exe (09-Apr-2025, 4:25:17 pm elapsed: 0:03:29) [pid: 1864]
Enrollment added successfully.
Enrollment successful!

==== Student Information System Menu ====
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
Enter choice: 3
Enter Teacher ID: 1
Enter new Email: asha.kulkarni@mituniversity.edu.in
Teacher updated: Dr. Asha Kulkarni
Teacher email updated in the database.

==== Student Information System Menu ====
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit

```

5. Assign Teacher to Course

```
38 int choice = 0;
39 do {
40     System.out.println("\n== Student Information System Menu ==");
41
42     === Student Information System Menu ===
43     1. Add New Student
44     2. Enroll Student in a Course
45     3. Update Teacher Email
46     4. Delete Enrollment Record
47     5. Assign Teacher to Course
48     6. Delete Student and Their Enrollments
49     7. Update Payment Amount
50     8. Generate Total Payments for a Student
51     9. Generate Enrollment Report
52     10. Record Payment for a Student
53     11. Show All Students
54     12. Exit
55     Enter choice: 5
56     Enter Course Code / ID: 3
57     Enter Teacher ID to assign: 2
58     Course updated: A & P
59     Teacher assigned to course successfully.
60
61     === Student Information System Menu ===
62     1. Add New Student
63     2. Enroll Student in a Course
64     3. Update Teacher Email
65     4. Delete Enrollment Record
66     5. Assign Teacher to Course
67     6. Delete Student and Their Enrollments
68     7. Update Payment Amount
69     8. Generate Total Payments for a Student
70     9. Generate Enrollment Report
71     10. Record Payment for a Student
72     11. Show All Students
73     12. Exit
74     Enter choice:
```

6. Delete Student and Their Enrollments

```
38 int choice = 0;
39 do {
40     System.out.println("\n== Student Information System Menu ==");
41
42     === Student Information System Menu ===
43     1. Add New Student
44     2. Enroll Student in a Course
45     3. Update Teacher Email
46     4. Delete Enrollment Record
47     5. Assign Teacher to Course
48     6. Delete Student and Their Enrollments
49     7. Update Payment Amount
50     8. Generate Total Payments for a Student
51     9. Generate Enrollment Report
52     10. Record Payment for a Student
53     11. Show All Students
54     12. Exit
55     Enter choice: 6
56     Enter Student ID to delete: 5
57     Deleted 1 enrollment(s) for student with ID: 5
58     Student removed with ID: 5
59     Student and all associated enrollments have been deleted from the database.
60
61     === Student Information System Menu ===
62     1. Add New Student
63     2. Enroll Student in a Course
64     3. Update Teacher Email
65     4. Delete Enrollment Record
66     5. Assign Teacher to Course
67     6. Delete Student and Their Enrollments
68     7. Update Payment Amount
69     8. Generate Total Payments for a Student
70     9. Generate Enrollment Report
71     10. Record Payment for a Student
72     11. Show All Students
73     12. Exit
```

7. Update Payment Amount

```
Java Assignments - SIS_Project/src/com/hexaware/sis/main/MainModule.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer
  Insurance Management System
  Java Operation's
  JDBC
  misc
  SIS_Project
    src
      com.hexaware.sis.entity
        Course.java
        Enrollment.java
        Payment.java
        Student.java
        Teacher.java
      com.hexaware.sis.exception
        CourseNotFoundException.java
        DuplicateEnrollmentException.java
        InsufficientFundsException.java
        InvalidCourseDataException.java
        InvalidEnrollmentDataException.java
        InvalidStudentDataException.java
        InvalidTeacherDataException.java
        PaymentNotFoundException.java
        PaymentValidationException.java
        StudentNotFoundException.java
        TeacherNotFoundException.java
      com.hexaware.sis.main
        MainModule.java
      com.hexaware.sis.main.dao
        CourseDAO.java
        EnrollmentDAO.java
        PaymentDAO.java
        StudentDAO.java
        TeacherDAO.java
      com.hexaware.sis.main.util
        DBConnUtil.java
        DBPropertyUtil.java
        dbconfig.properties

MainModule.java
  38 int choice = 0;
  39 do {
  40     System.out.println("\n=== Student Information System Menu ===");

Problems Javadoc Declaration Console x Install Java 24 Support
MainModule [Java Application] C:\Users\Mayuresh\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.21.0.6.v20250130-0529\jre\bin\javaw.exe (09-Apr-2025, 4:25:17 pm elapsed: 0:05:53) [pid: 1864]
Deleted 1 enrollment(s) for student with ID: 5
Student removed with ID: 5
Student and all associated enrollments have been deleted from the database.

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
Enter choice: 7
Enter Payment ID to update: 3
Enter new Payment Amount: 6500
Payment updated: ID 3, New Amount: $6500.0

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
```

8. Generate Total Payments for a Student

```
Java Assignments - SIS_Project/src/com/hexaware/sis/main/MainModule.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer
  Insurance Management System
  Java Operation's
  JDBC
  misc
  SIS_Project
    src
      com.hexaware.sis.entity
        Course.java
        Enrollment.java
        Payment.java
        Student.java
        Teacher.java
      com.hexaware.sis.exception
        CourseNotFoundException.java
        DuplicateEnrollmentException.java
        InsufficientFundsException.java
        InvalidCourseDataException.java
        InvalidEnrollmentDataException.java
        InvalidStudentDataException.java
        InvalidTeacherDataException.java
        PaymentNotFoundException.java
        PaymentValidationException.java
        StudentNotFoundException.java
        TeacherNotFoundException.java
      com.hexaware.sis.main
        MainModule.java
      com.hexaware.sis.main.dao
        CourseDAO.java
        EnrollmentDAO.java
        PaymentDAO.java
        StudentDAO.java
        TeacherDAO.java
      com.hexaware.sis.main.util
        DBConnUtil.java
        DBPropertyUtil.java
        dbconfig.properties

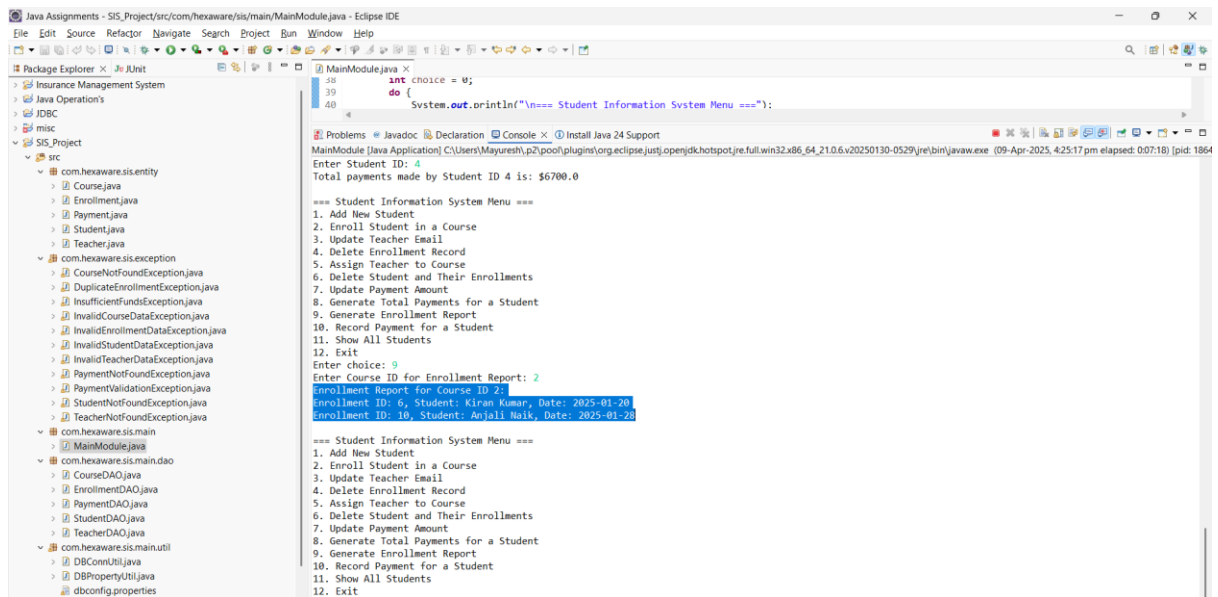
MainModule.java
  38 int choice = 0;
  39 do {
  40     System.out.println("\n=== Student Information System Menu ===");

Problems Javadoc Declaration Console x Install Java 24 Support
MainModule [Java Application] C:\Users\Mayuresh\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.21.0.6.v20250130-0529\jre\bin\javaw.exe (09-Apr-2025, 4:25:17 pm elapsed: 0:06:23) [pid: 1864]
Enter choice: 7
Enter Payment ID to update: 3
Enter new Payment Amount: 6500
Payment updated: ID 3, New Amount: $6500.0

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
Enter choice: 8
Enter Student ID: 4
Total payments made by Student ID 4 is: $6700.0

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
```

9. Generate Enrollment Report



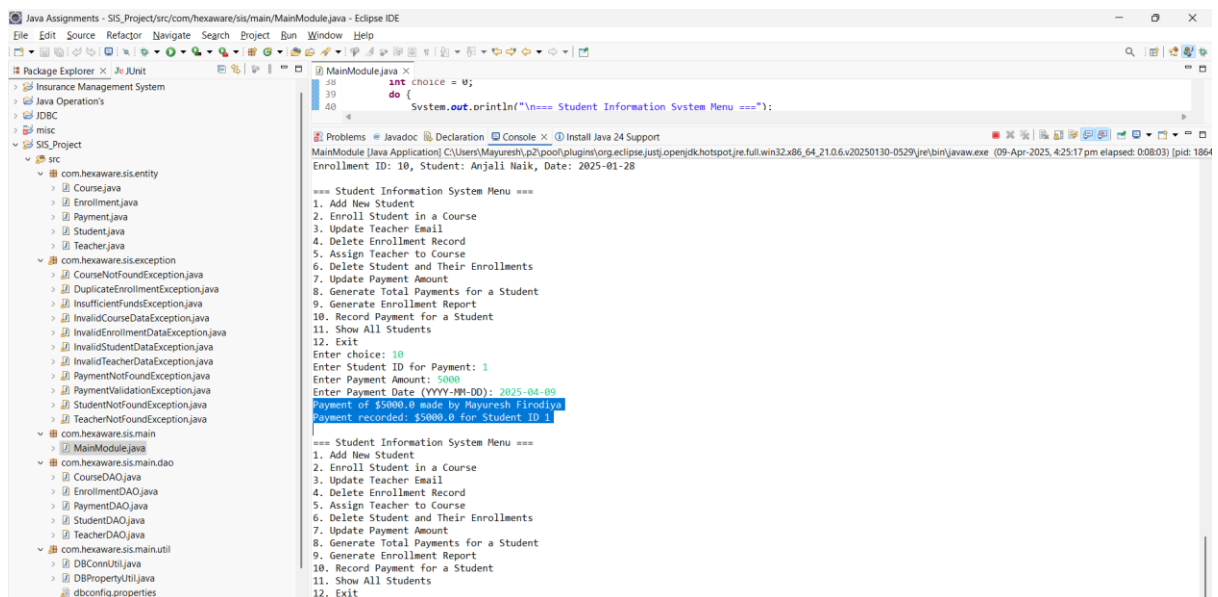
```
38 int choice = 0;
39 do {
40     System.out.println("\n=== Student Information System Menu ===");
41     ...
42 } while (choice != 12);

Enter Student ID: 4
Total payments made by Student ID 4 is: $6700.0

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
Enter choice: 9
Enter Course ID for Enrollment Report: 2
Enrollment Report for Course ID 2:
Enrollment ID: 6, Student: Kiran Kumar, Date: 2025-01-20
Enrollment ID: 10, Student: Anjali Naik, Date: 2025-01-20

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
```

10. Record Payment for a Student



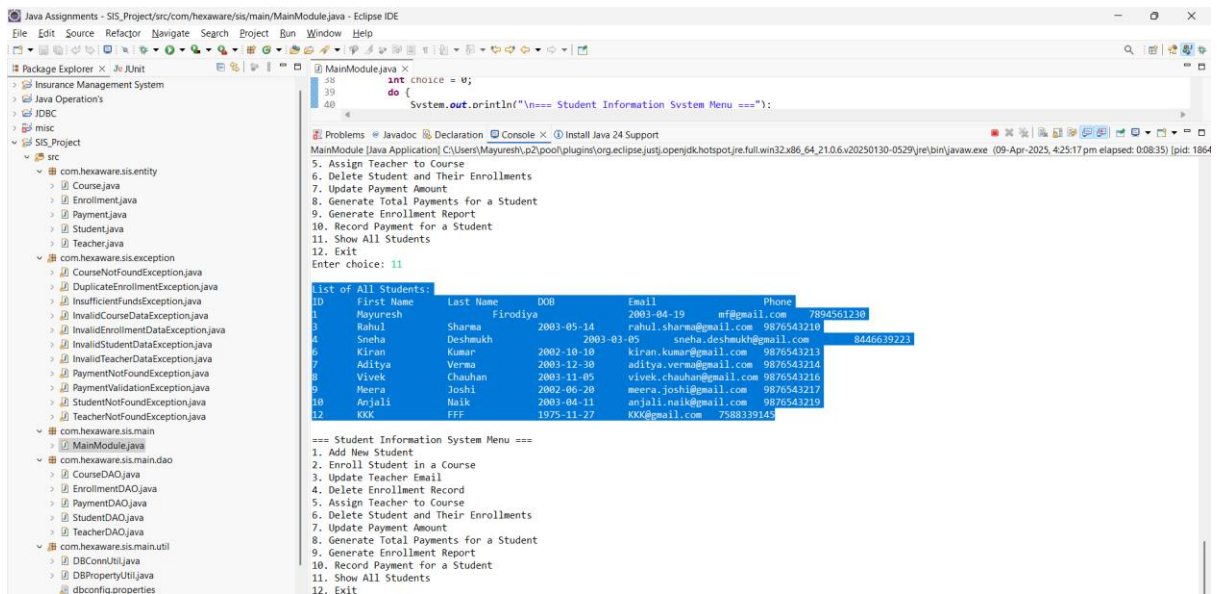
```
38 int choice = 0;
39 do {
40     System.out.println("\n=== Student Information System Menu ===");
41     ...
42 } while (choice != 12);

Enrollment ID: 10, Student: Anjali Naik, Date: 2025-01-20

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
Enter choice: 10
Enter Student ID for Payment: 1
Enter Payment Amount: 5000
Enter Payment Date (YYYY-MM-DD): 2025-04-09
Payment of $5000.0 made by Mayuresh Pirodya
Payment recorded: $5000.0 for Student ID 10

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
```

11. Show All Students

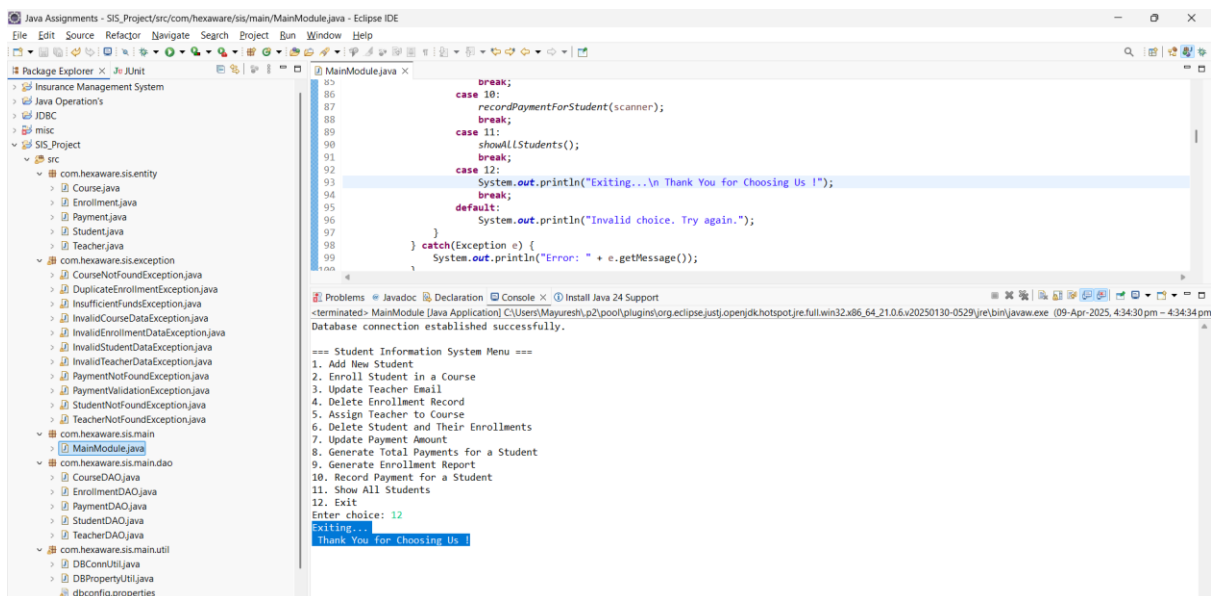


```
38 int choice = 0;
39 do {
40     System.out.println("\n=== Student Information System Menu ===");
41     // ... (other menu options) ...
42     Enter choice: 11

List of All Students:
ID First Name Last Name DOB Email Phone
1 Mayuresh Firodiya 2003-04-19 mf@gmail.com 9876543210 7894561230
2 Rahul Sharma 2003-05-14 rahul.sharma@gmail.com 9876543210 8446639223
3 Sneha Deshmukh 2003-03-05 sneha.deshmukh@gmail.com 9876543210
4 Kiran Kumar 2002-10-10 kiran.kumar@gmail.com 9876543210
5 Aditya Verma 2003-12-30 aditya.verma@gmail.com 9876543214
6 Vivek Chauhan 2003-11-05 vivek.chauhan@gmail.com 9876543216
7 Meera Joshi 2002-06-20 meera.joshi@gmail.com 9876543217
8 Anjali Naik 2003-04-11 anjali.naik@gmail.com 9876543219
9 XXX FFF 1975-11-27 xxx@gmail.com 789833914

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
```

12. Exit



```
87 break;
88 case 10:
89     recordPaymentForStudent(scanner);
90     break;
91 case 11:
92     showAllStudents();
93     break;
94 case 12:
95     System.out.println("Exiting...\n Thank You for Choosing Us!");
96     break;
97 default:
98     System.out.println("Invalid choice. Try again.");
99 } catch (Exception e) {
100     System.out.println("Error: " + e.getMessage());
101 }

Database connection established successfully.

=== Student Information System Menu ===
1. Add New Student
2. Enroll Student in a Course
3. Update Teacher Email
4. Delete Enrollment Record
5. Assign Teacher to Course
6. Delete Student and Their Enrollments
7. Update Payment Amount
8. Generate Total Payments for a Student
9. Generate Enrollment Report
10. Record Payment for a Student
11. Show All Students
12. Exit
Enter choice: 12
Exiting...
Thank You for Choosing Us
```