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import java.util.*;

class Student {
    int id;
    String name;
    double marks;

    Student(int id, String name, double marks) {
        this.id = id;
        this.name = name;
        this.marks = marks;
    }

    @Override
    public String toString() {
        return id + " - " + name + " - " + marks;
    }
}

public class StudentRecordSystem {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        List<Student> students = new ArrayList<>();

        while (true) {
            System.out.println("\n===== Student Record System =====");
            System.out.println("1. Add Student");
            System.out.println("2. Display Students");
            System.out.println("3. Search Student by ID");
            System.out.println("4. Delete Student by ID");
            System.out.println("5. Update Student by ID");
            System.out.println("6. Exit");
            System.out.print("Enter choice: ");

            int choice = sc.nextInt();
            sc.nextLine();

            switch (choice) {
                case 1: // Add
                    System.out.print("Enter ID: ");
                    int id = sc.nextInt();
                    sc.nextLine();
                    System.out.print("Enter Name: ");
                    String name = sc.nextLine();
                    System.out.print("Enter Marks: ");
                    double marks = sc.nextDouble();
                    students.add(new Student(id, name, marks));
                    System.out.println("Student added successfully.");

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break;
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case 2: // Display
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    if (students.isEmpty()) {  
        System.out.println("No records found.");  
    } else {  
        for (Student s : students) {  
            System.out.println(s);  
        }  
    }  
    break;
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case 3: // Search
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    System.out.print("Enter ID to search: ");  
    int searchId = sc.nextInt();  
    boolean found = false;  
    for (Student s : students) {  
        if (s.id == searchId) {  
            System.out.println("Record Found: " + s);  
            found = true;  
            break;  
        }  
    }  
    if (!found) {  
        System.out.println("Record not found!");  
    }  
    break;
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case 4: // Delete
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    System.out.print("Enter ID to delete: ");  
    int delId = sc.nextInt();  
    Iterator<Student> it = students.iterator();  
    boolean deleted = false;  
    while (it.hasNext()) {  
        if (it.next().id == delId) {  
            it.remove();  
            deleted = true;  
            System.out.println("Record deleted successfully.");  
            break;  
        }  
    }  
    if (!deleted) {  
        System.out.println("Record not found!");  
    }  
    break;
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case 5: // Update
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    System.out.print("Enter ID to update: ");
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int updl = sc.nextInt();
sc.nextLine();
boolean updated = false;
for (Student s : students) {
    if (s.id == updl) {
        System.out.print("Enter new name: ");
        s.name = sc.nextLine();
        System.out.print("Enter new marks: ");
        s.marks = sc.nextDouble();
        updated = true;
        System.out.println("Record updated successfully.");
        break;
    }
}
if (!updated) {
    System.out.println("Record not found!");
}
break;

case 6: // Exit
    System.out.println("Exiting...");
    sc.close();
    return;

default:
    System.out.println("Invalid choice, try again.");
}
}
}
}

```