

```
1 import java.util.ArrayList;
2 import java.util.List;
3 import java.util.Scanner;
4
5 class Student {
6     private String name;
7     private int rollNumber;
8     private String grade;
9
10    public Student(String name, int rollNumber, String grade) {
11        this.name = name;
12        this.rollNumber = rollNumber;
13        this.grade = grade;
14    }
15
16    public String getName() {
17        return name;
18    }
19
20    public int getRollNumber() {
21        return rollNumber;
22    }
23
24    public String getGrade() {
25        return grade;
26    }
```

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16    public String getName() {
17        return name;
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20    public int getRollNumber() {
21        return rollNumber;
22    }
23
24    public String getGrade() {
25        return grade;
26    }
27 }
```

```

40     .out.print("Enter student name: ");
41     name = scanner.nextLine();
42     .out.print("Enter student roll number: ");
43     int rollNumber = scanner.nextInt();
44     scanner.nextLine(); // Consume newline
45     scanner.nextInt();
46     scanner.nextLine();
47     .out.print("Enter student grade: ");
48     String grade = scanner.nextLine();
49     Student newStudent = new Student(name, rollNumber, grade);
50     students.add(newStudent);
51     .out.println("Student added successfully.");
52     students.add(newStudent);
53     .out.println("Student added successfully.");
54 }
55 public void removeStudent() {
56     .out.print("Enter student roll number to remove: ");
57     int rollToRemove = scanner.nextInt();
58     scanner.nextLine(); // Consume newline
59     scanner.nextInt();
60     scanner.nextLine(); // Consume newline
61     boolean found = false;
62     for (Student student : students) {
63         if (student.getRollNumber() == rollToRemove) {
64             students.remove(student);
65             .out.println("Student removed successfully.");
66             found = true;
67             break;
68         }
69     }
70     if (!found) {
71         .out.println("Student not found.");
72     }
73 }

```



```
115 Scanner scanner = new Scanner(System.in);
116 int choice = scanner.nextInt();
117 scanner.nextLine(); // Consume newline
118
119 switch (choice) {
120     case 1:
121         system.addStudent();
122         break;
123     case 2:
124         system.removeStudent();
125         break;
126     case 3:
127         system.searchStudent();
128         break;
129     case 4:
130         system.displayAllStudents();
131         break;
132     case 5:
133         running = false;
134         break;
135     default:
136         System.out.println("Invalid choice. Please try again.");
137         break;
138 }
139
140 }
141
142 }
```

The output

```
116 Scanner scanner = new Scanner(System.in);
117 int choice = scanner.nextInt();
118 scanner.nextLine(); // Consume newline
119
```

input

Student Management System Menu:

1. Add Student
2. Remove Student
3. Search Student
4. Display All Students
5. Exit

Enter your choice: 1

Enter student name: acd

Enter student roll number: 2

Enter student grade: A

Student added successfully.

Student Management System Menu:

1. Add Student
2. Remove Student
3. Search Student
4. Display All Students
5. Exit

Enter your choice: 4

All Students:

Name: acd, Roll Number: 2, Grade: A

Student Management System Menu:

1. Add Student
2. Remove Student