



```
1 import java.util.ArrayList;
2 import java.util.Scanner;
3
4 class Student {
5     private int id;
6     private String name;
7     private double marks;
8
9     public Student(int id, String name
        , double marks) {
10         this.id = id;
11         this.name = name;
12         this.marks = marks;
13     }
14
15     public int getId() {
16         return id;
17     }
18
19     public String getName() {
20         return name;
21     }
22
23     public double getMarks() {
24         return marks;
25     }
26
27     public void setName(String name) {
28         this.name = name;
29     }
```

**Run**



```
29     }
30
31     public void setMarks(double marks)
32     {
33         this.marks = marks;
34     }
35
36     public String toString() {
37         return "ID: " + id + ", Name:
38             " + name + ", Marks: " +
39             marks;
40     }
41 }
42
43 public class Main {
44
45     static ArrayList<Student> students
46         = new ArrayList<>();
47     static Scanner sc = new Scanner
48         (System.in);
49
50     public static void main(String[]
51         args) {
52
53         while (true) {
54             System.out.println("\n
55                 ===== Student Record
56                 Management System
57                 =====");
58             System.out.println("1. Add
```

Run

Main.j...

Output



```
49      System.out.println("1. Add
      Student");
50      System.out.println("2.
      View Students");
51      System.out.println("3.
      Update Student");
52      System.out.println("4.
      Delete Student");
53      System.out.println("5.
      Exit");
54      System.out.print("Enter
      your choice: ");
55
56      int choice = sc.nextInt();
57
58      switch (choice) {
59          case 1:
60              addStudent();
61              break;
62          case 2:
63              viewStudents();
64              break;
65          case 3:
66              updateStudent();
67              break;
68          case 4:
69              deleteStudent();
70              break;
71          case 5:
72              System.out.println
```

Run



```
72         System.out.println
           ("Exiting... Thank
           you!");
73         return;
74     default:
75         System.out.println
           ("Invalid choice!"
           );
76     }
77 }
78 }
79
80 static void addStudent() {
81     System.out.print("Enter ID: "
82                     );
83     int id = sc.nextInt();
84     sc.nextLine();
85     System.out.print("Enter Name:
86                     ");
87     String name = sc.nextLine();
88     System.out.print("Enter Marks:
89                     ");
90     double marks = sc.nextDouble
91                 ();
92     students.add(new Student(id,
                               name, marks));
93     System.out.println("Student
```



```
92         System.out.println("Student
           added successfully!");
93     }
94
95     static void viewStudents() {
96         if (students.isEmpty()) {
97             System.out.println("No
           students found.");
98         } else {
99             for (Student s : students)
           {
100                 System.out.println(s);
101             }
102         }
103     }
104
105     static void updateStudent() {
106         System.out.print("Enter ID to
           update: ");
107         int id = sc.nextInt();
108         sc.nextLine();
109
110         for (Student s : students) {
111             if (s.getId() == id) {
112                 System.out.print
           ("Enter new name: "
           );
113                 s.setName(sc.nextLine
           ());
```

Run



```
114
115         System.out.print
            ("Enter new marks:
            ");
116         s.setMarks(sc
            .nextDouble());
117
118         System.out.println
            ("Student updated
            successfully!");
119         return;
120     }
121 }
122
123     System.out.println("Student
        not found.");
124 }
125
126 static void deleteStudent() {
127     System.out.print("Enter ID to
        delete: ");
128     int id = sc.nextInt();
129
130     for (Student s : students) {
131         if (s.getId() == id) {
132             students.remove(s);
133             System.out.println
                ("Student deleted
                successfull
134         return;
```

Run



===== Student Record Management System =====

1. Add Student
2. View Students
3. Update Student
4. Delete Student
5. Exit

Enter your choice: 1

Enter ID: 101

Enter Name: harsha

Enter Marks: 85|