

Main.j...

Output



```
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
10                 , double marks) {
11         this.id = id;
12         this.name = name;
13         this.marks = marks;
14     }
15
16     public int getId() {
17         return id;
18     }
19
20     public String getName() {
21         return name;
22     }
23
24     public double getMarks() {
25         return marks;
26     }
27
28     public void setName(String name) {
29         this.name = name;
30     }
```

Run



```
29      }
30
31  public void setMarks(double marks)
32  {
33      this.marks = marks;
34
35  public String toString() {
36      return "ID: " + id + ", Name:
37          " + name + ", Marks: " +
38      marks;
39
40  public class Main {
41
42      static ArrayList<Student> students
43          = new ArrayList<>();
44
45  public static void main(String[]
46      args) {
47
48      while (true) {
49          System.out.println("\n
50              ===== Student Record
51              Management System
52              =====");
53
54          System.out.println("1. Add
55              Student Record
56              2. View Student Record
57              3. Update Student Record
58              4. Delete Student Record
59              5. Exit
60
61          Enter Your Choice: ");
62
63          Scanner sc = new Scanner
64              (System.in);
65
66          int choice = sc.nextInt();
67
68          switch (choice) {
69              case 1:
70                  addStudent();
71                  break;
72              case 2:
73                  viewStudent();
74                  break;
75              case 3:
76                  updateStudent();
77                  break;
78              case 4:
79                  deleteStudent();
80                  break;
81              case 5:
82                  System.out.println("Exiting
83                      Program...");
84                  System.exit(0);
85              default:
86                  System.out.println("Invalid
87                      Choice! Please Try Again.");
88          }
89      }
90  }
```

Run

System.out.println("1. Add

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  
73              ("Exiting... Thank  
74                  you!");  
75          return;  
76      default:  
77          System.out.println  
78              ("Invalid choice!"  
79          );  
80      }  
81  }  
82  
83  
84  
85  static void addStudent() {  
86      System.out.print("Enter ID: "  
87                      );  
88      int id = sc.nextInt();  
89      sc.nextLine();  
90  
91      System.out.print("Enter Name: "  
92                      );  
93      String name = sc.nextLine();  
94  
95      System.out.print("Enter Marks: "  
96                      );  
97      double marks = sc.nextDouble  
98          ();  
99  
100     students.add(new Student(id,  
101                     name, marks));  
102     System.out.println("Student
```

Run



```
92         System.out.println("Student  
93             added successfully!");  
94  
95     static void viewStudents() {  
96         if (students.isEmpty()) {  
97             System.out.println("No  
98                 students found.");  
99         } else {  
100            for (Student s : students)  
101                {  
102                    System.out.println(s);  
103                }  
104  
105    static void updateStudent() {  
106        System.out.print("Enter ID to  
107            update: ");  
108        int id = sc.nextInt();  
109        sc.nextLine();  
110        for (Student s : students) {  
111            if (s.getId() == id) {  
112                System.out.print  
113                  ("Enter new name: ")  
114                  s.setName(sc.nextLine()  
115                  ());
```

Run



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