

```
1 import java.util.Scanner;
2 import java.util.ArrayList;
3
4 /**
5  * @author David Maglica
6  */
7
8 public class Main {
9     /**
10      * Preinačiti Primjer 2.3 na način da je moguć unos podataka studentima putem tipkovnice
11      * Kada korisnik više ne želi unositi podatke omogućiti mu ispis svih zapisa studenata.
12      * Također ponuditi mu i mogućnosti izlaza iz programa.
13      * @param args
14      */
15     public static void main(String[] args) {
16         Scanner sc = new Scanner(System.in);
17         String newStudent = "da"; String newGrade = "da";
18
19         ArrayList<Student> students = new ArrayList<Student>();
20         while (newStudent.equalsIgnoreCase("da")) {
21             Student student = new Student();
22             student.init();
23
24             System.out.println("Želite li dodati novog studenta (da/ne)?");
25             newStudent = sc.next();
26             if (newStudent.equalsIgnoreCase("ne")) {
27                 break;
28             }
29             else {
30                 System.out.println("Ime: "); student.setName(sc.next());
31                 System.out.println("Prezime: "); student.setSurname(sc.next());
32                 System.out.println("Id: "); student.setId(sc.next());
33             }
34
35             while (newGrade.equalsIgnoreCase("da")) {
36                 System.out.println("\nUpis novog kolegija(da/ne)?");
37                 newGrade = sc.next();
38                 if (newGrade.equalsIgnoreCase("ne")) {
39                     newGrade = "da"; // ova linija omogućava dodavanje predmeta i drugim
studentima a ne samo prvom
40                     break;
41                 }
42                 else {
43                     System.out.println("Kod kolegija: "); int code = sc.nextInt();
44                     System.out.println("Naziv kolegija: "); String title = sc.next();
45                     System.out.println("Završna ocjena: "); int grade = sc.nextInt();
46                     student.addGrade(code, title, grade);
47                 }
48             }
49             students.add(student);
50         }
51
52         System.out.println("\nŽelite li ispisati sve studente (da/ne)?");
53         String printOut = sc.next();
54         if (printOut.equalsIgnoreCase("da")) {
55             for (int i = 0; i < students.size(); i++) {
56                 int brojac = i+1;
57                 System.out.println("\n-----\nStudent br." + brojac);
58                 System.out.println("ID: " + students.get(i).getId());
59                 System.out.println("Ime: " + students.get(i).getName());
```

```
60         System.out.println("Prezime: " + students.get(i).getSurname());
61         System.out.println("Upisani predmeti:"); students.
62         System.out.println("Prosjek ocjena: " + students.get(i).averageGrade());
63     }
64 }
65 }
66 }
```

```
1 public class Student {
2     private String id;
3     private String name;
4     private String surname;
5     private int noOfGrades;
6     private CourseGrade[] grades;
7     final int ARR_SIZE = 60;
8
9     void init () {
10         grades = new CourseGrade[ARR_SIZE];
11         noOfGrades = 0;
12     }
13
14     public void addGrade (int code, String title, int grade) {
15         if (grade >= 2 && grade <= 5) {
16             CourseGrade courseGrade = new CourseGrade();
17             courseGrade.code = code;
18             courseGrade.title = title;
19             courseGrade.grade = grade;
20
21             grades[noOfGrades++] = courseGrade;
22         }
23     }
24
25     double averageGrade () {
26         int sum = 0;
27         for (int i = 0; i < noOfGrades; i++) sum += grades[i].grade;
28         return noOfGrades > 0 ? (double) sum / noOfGrades : 0;
29     }
30
31     public String getId () { return id; }
32
33     public void setId (String newId) { id = newId; }
34
35     public String getName () { return name; }
36
37     public void setName (String newName) { name = newName; }
38
39     public String getSurname () { return surname; }
40
41     public void setSurname (String newSurname) { surname = newSurname; }
42
43     @Override
44     public String toString () {
45         return String.format("%s - %s, %s - Average grade %.2f",
46             id, surname, name, averageGrade());
47     }
48
49     @Override
50     public boolean equals (Object obj) {
51         // pretpostavljamo da je predani objekt iz klase student
52         Student otherStudent = (Student) obj;
53         return id.equals(otherStudent.id);
54     }
55 }
56
```

```
1 public class CourseGrade {  
2     int code;  
3     String title;  
4     int grade;  
5 }  
6
```

```
1 "C:\Program Files\BellSoft\LibericaJDK-19-Full\bin\java.exe" "-javaagent:C:\Program Files\
JetBrains\IntelliJ IDEA 2022.2.3\lib\idea_rt.jar=63859:C:\Program Files\JetBrains\IntelliJ
IDEA 2022.2.3\bin" -Dfile.encoding=UTF-8 -Dsun.stdout.encoding=UTF-8 -Dsun.stderr.encoding=
UTF-8 -classpath D:\Faks\SuvremeneTehnikeProgramiranja\Zadace\zadaca02.B\out\production\
zadaca02.B Main
2 Zelite li dodati novog studenta (da/ne)?
3 da
4 Ime:
5 Ivan
6 Prezime:
7 Ivić
8 Id:
9 0030154976
10
11 Upis novog kolegija(da/ne)?
12 da
13 Kod kolegija:
14 1
15 Naziv kolegija:
16 STP
17 Zavrсна ocjena:
18 5
19
20 Upis novog kolegija(da/ne)?
21 da
22 Kod kolegija:
23 2
24 Naziv kolegija:
25 DistSys
26 Zavrсна ocjena:
27 3
28
29 Upis novog kolegija(da/ne)?
30 da
31 Kod kolegija:
32 3
33 Naziv kolegija:
34 Statistika
35 Zavrсна ocjena:
36 5
37
38 Upis novog kolegija(da/ne)?
39 ne
40 Zelite li dodati novog studenta (da/ne)?
41 da
42 Ime:
43 Luka
44 Prezime:
45 Marin
46 Id:
47 0030695813
48
49 Upis novog kolegija(da/ne)?
50 da
51 Kod kolegija:
52 1
53 Naziv kolegija:
54 STP
55 Zavrсна ocjena:
56 2
```

```
57
58 Upis novog kolegija(da/ne)?
59 da
60 Kod kolegija:
61 2
62 Naziv kolegija:
63 DistSys
64 Zavrсна ocjena:
65 4
66
67 Upis novog kolegija(da/ne)?
68 da
69 Kod kolegija:
70 3
71 Naziv kolegija:
72 Statistika
73 Zavrсна ocjena:
74 4
75
76 Upis novog kolegija(da/ne)?
77 ne
78 Zelite li dodati novog studenta (da/ne)?
79 ne
80
81 Zelite li ispisati sve studente (da/ne)?
82 da
83
84 -----
85 Student br.1
86 ID: 0030154976
87 Ime: Ivan
88 Prezime: Ivić
89 Prosjek ocjena: 4.333333333333333
90
91 -----
92 Student br.2
93 ID: 0030695813
94 Ime: Luka
95 Prezime: Marin
96 Prosjek ocjena: 3.3333333333333335
97
98 Process finished with exit code 0
99
```