

```

1 //2016.Resit
2
3 import java.util.ArrayList;
4
5
6 public class Module {
7     private List<Student> students;
8     private String code;
9
10    public Module(String c) {
11        students = new ArrayList<Student>();
12        code = c;
13    }
14
15    public void addStudent(Student s) {
16        students.add(s);
17    }
18
19    public String getBest() {
20        double highest = -1;
21        String id = "None";
22        for (Student s : students) {
23            if (s.getAverage() > highest) {
24                highest = s.getAverage();
25                id = s.getID();
26            }
27        }
28        return id;
29    }
30
31    public String getWorst() {
32        double lowest = 101;
33        String id = "None";
34        for (Student s : students) {
35            if (s.getAverage() < lowest) {
36                lowest = s.getAverage();
37                id = s.getID();
38            }
39        }
40        return id;
41    }
42
43    public double getAverage(int i) {
44        double sum = 0;
45        for (Student s : students) {
46            sum = sum + s.getResults(i);
47        }
48        return sum / students.size();
49    }
50
51    public String toString() {
52        String s = "Details for module " + code + "\n";
53        s += "Best Student: " + getBest() + "\n";
54        s += "Worst Student: " + getWorst() + "\n";
55        for (int i = 0; i < 5; i++) {
56            s += "Average for assignment " + (i + 1) + " is " + getAverage(i) + "\n";
57        }
58        return s;
59    }
60 }
61

```