```java
package work;

import java.util.ArrayList;

public class StudentTest {
    public static void main(String[] args) {

        List<Student> list1 = new ArrayList<Student>();

        list1.add(new Student("1004", "조태희", 100, 100, 100));
        list1.add(new Student("1050", "조태조", 70, 56, 90));
        list1.add(new Student("1679", "조태태", 66, 80, 34));
        list1.add(new Student("1000", "조조조", 90, 50, 40));
        list1.add(new Student("1046", "태태태", 29, 18, 87));
        list1.add(new Student("1079", "희희희", 74, 94, 91));

        for (Student student : list1) {
            int rank = 1;
            for (Student student2 : list1) {
                if (student.getScore() < student2.getScore()) {
                    rank++;
                }

            }
            student.setrank(rank);
        }

        // 학번 오름차순 정렬
        Collections.sort(list1);

        for (Student o : list1) {
            System.out.println(o);
        }

        System.out.println
  ("-------------------------------------------------------------------------------------
  --");

        Collections.shuffle(list1);

        // 총점 내림차순 정렬
        Collections.sort(list1, new SScore());
        for (Student o : list1) {
            System.out.println(o);
        }

    }
}

class SScore implements Comparator<Student> {

    @Override
    public int compare(Student o1, Student o2) {
        if (o1.getScore() == o2.getScore()) {
            return o1.getId().compareTo(o2.getId()) * -1;
        } else {
            return new Integer((int) o1.getScore()).compareTo((int) o2.getScore()) * -1;
        }
    }

}

```

```java
class Student implements Comparable<Student> {
    private String id;
    private String name;
    private double korean;
    private double english;
    private double math;
    private double score;
    private int rank;

    public Student(String id, String name, double korean, double english, double math) {

        this.id = id;
        this.name = name;
        this.korean = korean;
        this.english = english;
        this.math = math;
        this.score = korean + english + math;
        this.rank = 1;

    }

    public String getId() {
        return id;
    }

    public void setId(String id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public double getKorean() {
        return korean;
    }

    public void setKorean(double korean) {
        this.korean = korean;
    }

    public double getEnglish() {
        return english;
    }

    public void setEnglish(double english) {
        this.english = english;
    }

    public double getMath() {
        return math;
    }

    public void setMath(double math) {
        this.math = math;
    }

    public double getScore() {
```

```
126         return score;
127     }
128 
129     public void setScore(double score) {
130         this.score = score;
131     }
132 
133     public int getrank() {
134         return rank;
135     }
136 
137     public void setrank(int rank) {
138         this.rank = rank;
139     }
140 
141     @Override
142     public String toString() {
143         return "Student [id=" + id + ", name=" + name + ", korean=" + korean + ", english="
    + english + ", math=" + math
144                 + ", score=" + score + ", rank=" + rank + "]";
145     }
146 
147     @Override
148     public int compareTo(Student o) {
149         return id.compareTo(o.getId());
150     }
151 
152 }
153 
```