“SortingStudentsByGPA.java”

import java.util.Comparator;

public class SortingStudentsByGPA implements Comparator {

@Override

public int compare(Object o1, Object o2) {

if(((Student)o1).getGPA()>((Student)o2).getGPA()){

return -1;

}

else return 1;

}

}

“Student.java”

public class Student {

String name;

String lastname;

int GPA;

public Student(String name, String lastname, int GPA) {

this.name = name;

this.lastname = lastname;

this.GPA = GPA;

}

public String getName() {

return name;

}

public String getLastname() {

return lastname;

}

public int getGPA() {

return GPA;

}

@Override

public String toString() {

return "Student{" +

"name='" + name + '\'' +

", lastname='" + lastname + '\'' +

", GPA=" + GPA +

'}';

}

}

“SortTest.java”

import java.util.Collections;

public class SortTest {

public static void main(String[] args) {

StudentList example = new StudentList();

for(Student student:example.list){

System.out.println(student.toString());

}

Collections.sort(example.list, new SortingStudentsByGPA());

System.out.println("После сортировки:");

for(Student student:example.list){

System.out.println(student.toString());

}

}

}

“StudentList.java”

import java.util.ArrayList;

public class StudentList {

Student one = new Student("Maksim", "Beloliptsev", 4);

Student two = new Student("Artem","Khozyainov", 5);

Student three = new Student("Denis", "Melnikov", 3);

ArrayList<Student> list = new ArrayList<>();

StudentList(){

list.add(one);

list.add(two);

list.add(three);

}

}