

Class Student

```
public class Student {  
  
    private String name;  
    private int id;  
    private int age;  
    private String gender;  
  
    public Student(String name, int id, int age, String gender) {  
        this.name = name;  
        this.id = id;  
        this.age = age;  
        this.gender = gender;  
    }  
  
    public String getName() {  
        return name;  
    }  
    public int getId() {  
        return id;  
    }  
    public int getAge() {  
        return age;  
    }  
    public String getGender() {  
        return gender;  
    }  
  
    public void display(){  
        System.out.println("Student name: " + name);  
        System.out.println("Student id: " + id);  
        System.out.println("Student age: " + age);  
        System.out.println("Student gender: " + gender);  
    }  
}
```

Class Section

```
public class Section {
    private Student arrStu[];
    private int nbStu;
    public Section(int size){
        arrStu = new Student[size];
        nbStu = 0;
    }
    public boolean addStudent(Student st){
        if(nbStu >= arrStu.length)
            return false;
        arrStu[nbStu++] = st;
        return true;
    }
    public int searchStudent(int id){
        for(int i = 0; i < nbStu; i++)
            if(arrStu[i].getId() == id)
                return i;
        return -1;
    }

    public boolean deleteStudent(int id){
        int index = searchStudent(id);
        if(index == -1)
            return false;
        arrStu[index] = arrStu[nbStu-1];
        arrStu[nbStu-1] = null;
        nbStu--;
        return true;
    }

    public void displayAll(){
        for(int i = 0; i < nbStu; i++)
            arrStu[i].display();
    }

    public void display(int index){
        if(index >= 0 && index < nbStu)
            arrStu[index].display();
        else
            System.out.println("Wrong index");
    }
}
```

```

public void display(String name){
    for(int i = 0; i < nbStu; i++)
        if(arrStu[i].getName().equalsIgnoreCase(name))
            arrStu[i].display();
}
public void displaySameAs(Student st){
    for(int i = 0; i < nbStu; i++)
        if(arrStu[i].getName().equalsIgnoreCase(st.getName())
            && arrStu[i].getAge() == st.getAge()
            &&
arrStu[i].getGender().equalsIgnoreCase(st.getGender()))
            arrStu[i].display();
}
public Student searchFirst(String name){
    for(int i = 0; i < nbStu; i++)
        if(arrStu[i].getName().equalsIgnoreCase(name))
            return arrStu[i];
    return null;
}
public Student searchLast(String name){
    Student temp = null;
    for(int i = 0; i < nbStu; i++)
        if(arrStu[i].getName().equalsIgnoreCase(name))
            temp = arrStu[i];
    return temp;
}

public Student[] getStudents(int age){
    int size = 0;
    for(int i = 0; i < nbStu; i++)
        if(arrStu[i].getAge() < age)
            size++;
    Student temp[] = new Student[size];
    int counter = 0;
    for(int i = 0; i < nbStu; i++)
        if(arrStu[i].getAge() < age)
            temp[counter++] = arrStu[i];
    return temp;
}
}

```