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

```java
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 searchStu(int id) {
        for(int i = 0; i < nbStu; i++) {
            if(arrStu[i].getId() == id)
                return i;
        }
        return -1;
    }

    public boolean deleteStu(int id) {
        int index = searchStu(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();
        System.out.println("Invalid index");
    }
```

```java
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) {
      for(int i = nbStu-1; i >= 0; i--) {
            if(arrStu[i].getName().equalsIgnoreCase(name))
                  return arrStu[i];
      }
      return null;
}

public Student searchLast2(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 tempArr[] = new Student[size];
      int count = 0;
```

```
        for(int i = 0; i < nbStu; i++) {
            if(arrStu[i].getAge() < age)
                tempArr[count++] = arrStu[i];
        }
        return tempArr;
    }
}
```