public class Student {  
        private int studentId;  
        private String studentName;  
        private int studentAge;  
          
                  
          
        public Student(int studentId, String studentName, int studentAge) {  
                  
                this.studentId = studentId;  
                this.studentName = studentName;  
                this.studentAge = studentAge;  
        }  
        public int getStudentId() {  
                return studentId;  
        }  
        public void setStudentId(int studentId) {  
                this.studentId = studentId;  
        }  
        public String getStudentName() {  
                return studentName;  
        }  
        public void setStudentName(String studentName) {  
                this.studentName = studentName;  
        }  
        public int getStudentAge() {  
                return studentAge;  
        }  
        public void setStudentAge(int studentAge) {  
                this.studentAge = studentAge;  
        }          
          
          
  
}  
  
  
public class Section {  
        private Student arrayStu[];  
        private int counter;  
          
        public Section(int size)  
        {  
                arrayStu=new Student[size];  
                counter=0;  
        }  
        public boolean addStudent(Student stu)  
        {  
                if(counter < arrayStu.length)  
                        {  
                        arrayStu[counter] = stu;  
                        counter++;  
                        return true;  
                        }  
                else  
                        return false;  
        }  
          
          
          
          
        public int search(int id)  
        {  
                for(int i=0;i<counter;i++)  
                        if(id==arrayStu[i].getStudentId())  
                                return i;  
                  
                return -1;  
                  
                  
        }  
          
        boolean deleteStu(int id)  
        {  
                int index=search(id);  
                if(index==-1)  
                        return false;  
                else  
                {  
                        arrayStu[index]=arrayStu[counter-1];  
                        arrayStu[counter-1]=null;  
                        counter--;  
                        return true;  
                }  
                  
                  
        }  
          
          
        public int findMaxAge()  
        {  
                int max =arrayStu[0].getStudentAge() ;  
                for(int i=1; i<counter; i++)  
                        if(arrayStu[i].getStudentAge()>max)  
                                max = arrayStu[i].getStudentAge();  
                return max;  
        }  
          
          
        public int findMinAge()  
        {  
                int min =arrayStu[0].getStudentAge() ;  
                for(int i=1; i<counter; i++)  
                        if(arrayStu[i].getStudentAge()<min)  
                                min = arrayStu[i].getStudentAge();  
                return min;  
        }  
          
          
          
        public double calculateTotalAges()  
        {  
                double sum = 0.0;  
                for(int i=0; i<counter; i++)  
                        sum += arrayStu[i].getStudentAge();  
                return sum;  
        }  
          
        public double calculateAvgAge()  
        {  
                if (counter==0)  
                        return 0.0;  
                else  
                        return calculateTotalAges()/counter;  
                  
        }  
          
          
          
          
          
        public void printStuData(int id)  
        {  
                int index=search(id);  
                if(index==-1)  
                        System.out.println("Student not Found");  
                else  
                {  
                        System.out.println("Id= "+arrayStu[index].getStudentId());  
                        System.out.println("Name= "+arrayStu[index].getStudentName());  
                        System.out.println("Age= "+arrayStu[index].getStudentAge());  
                          
                }  
                  
        }  
  
                  
  
}  
  
  
  
public class TestSection {  
  
        /\*\*  
         \* @param args  
         \*/  
        public static void main(String[] args) {  
                // TODO Auto-generated method stub  
                Section sec=new Section(10);  
                Student st1=new Student(101,"Aaa",21);  
                Student st2=new Student(102,"Bbb",19);  
                Student st3=new Student(103,"Ccc",22);  
                Student st4=new Student(104,"Ddd",24);  
                Student st5=new Student(105,"Eee",18);  
                  
                System.out.println(sec.addStudent(st1));  
                System.out.println(sec.addStudent(st2));  
                System.out.println(sec.addStudent(st3));  
                System.out.println(sec.addStudent(st4));  
                System.out.println(sec.addStudent(st5));  
                  
                System.out.println(sec.search(109));  
                  
                System.out.println(sec.findMaxAge());  
                System.out.println(sec.findMinAge());  
                  
                sec.printStuData(109);  
                if(sec.deleteStu(103)==true)  
                        System.out.println("student deleted");  
                else  
                        System.out.println("not found");  
                  
                  
        }  
  
}