

```
public class ProgressStackerApp{

    //student class
    static class Student{
        private String name;
        private int rollNo;
        private String course;
        private int[] marks;

        //constructor
        public Student(String name,int rollNo,String course,int[] marks )
        {
            this.name=name;
            this.rollNo=rollNo;
            this.course=course;
            this.marks=marks;

        }
        //gettr , setter
        public String getName(){
            return name;
        }

        public int getRollNo(){
            return rollNo;
        }

        public String getCourse(){
            return course;
        }

        public int[] getMarks(){
            return marks;
        }

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

        public void setRollNo(int rollNo){
            this.rollNo=rollNo;
        }

        public void setCourse(String course){
            this.course=course;
        }
    }
}
```

```
}
```

```
public void setMarks(int[] marks){  
    this.marks=marks;  
}
```

```
//method calculate grade
```

```
public String CalculateGrade(){  
    int total=0;  
    for(int mark:marks){  
        total+=mark;  
    }  

```

```
    double average = total / (double)marks.length;  
    if(average>=85)return "A";  
    else if(average>=70)return "B";  
    else if(average>=50)  
        return "C";  
    else  
        return "D";  
}
```

```
//methid for student info
```

```
public String getStudentInfo(){  
    return "Name : " +name+", RollNo:" +rollNo+", course:"+course;  
}
```

```
public String getPerformance(){  
    return getStudentInfo()+"Grade: "+CalculateGrade();  
}
```

```
}
```

```
//inheritance
```

```
static class SpecialStudent extends Student{  
    private String award;
```

```
    public SpecialStudent(String name,int rollNo,String course, int[] marks,String  
award){  
        super(name, rollNo, course, marks);  
        this.award=award;  
    }  

```

```
    public String getAward(){  
        return award;  
    }  

```

```

public void setAward(String award){
    this.award=award;
}

//method override
@Override
public String getPerformance(){
    return super.getPerformance()+"Award :"+award;
}
}

public static void main(String[] args){
    //array of 5 student
    Student[] student=new Student[5];
    student[0]=new Student("vaishnavi" ,101,"Math",new int[]{83,30,20});
    student[1]=new Student("rina",102,"hindi",new int[]{60,40,65});
    student[2]=new Student("sima" ,102,"hindi",new int[]{95,98,100});
    student[3]=new Student("tina",102,"hindi",new int[]{59,50,58});
    student[4]=new Student("rahul",102,"hindi",new int[]{89,92,90});

    for(int i=0;i<student.length;i++){
        System.out.println(student[i].getPerformance());
    }
}
}

```

=====

Output :

```

Name : vaishnavi, RollNo:101, course:Math,Grade: D
Name : rina, RollNo:102, course:hindi,Grade: C
Name : sima, RollNo:102, course:hindi,Grade: A
Name : tina, RollNo:102, course:hindi,Grade: C
Name : rahul, RollNo:102, course:hindi,Grade: A

```

