//main class

import javax.swing.\*;

import java.util.Scanner;

public class assignment2 {

public static void main(String[] args) {

StudentDatabase s=new StudentDatabase();

Scanner sc=new Scanner(System.*in*);

System.*out*.println("input id");

int i=sc.nextInt();

s.setId(i);

String n;

System.*out*.println("enter name");

n=sc.nextLine();

n=sc.nextLine();

s.setName(n);

System.*out*.println(s.toString());

StudentProgress d=new StudentProgress();

int scimarks;

int biolgymarks;

System.*out*.println("input science marks:");

scimarks=sc.nextInt();

d.setSciencemarks(scimarks);

System.*out*.println("input bio marks:");

biolgymarks=sc.nextInt();

d.setBiomarks(biolgymarks);

d.allsubtotal();

d.per();

d.gradeSt();

d.cgpa();

System.*out*.println(d.toString());

}

}

//Second class associated with main class by making object in main class of second class

public class StudentDatabase {

private int id;

private String name;

public StudentDatabase() {

}

public StudentDatabase(int id, String name) {

this.id = id;

this.name = name;

}

public void setId(int id) {

this.id = id;

}

public void setName(String name) {

this.name = name;

}

public int getId() {

return id;

}

public String getName() {

return name;

}

@Override

public String toString() {

return "StudentDatabase{" +

"id=" + id +

", name=" + name +

'}';

}

}

// last class which is also associated with main class using object in main class of that class

public class StudentProgress {

private int sciencemarks;

private int biomarks;

public int subtotal;

public float percentage;

private String grade="";

private float cgpa;

public StudentProgress() {

}

public StudentProgress(int sciencemarks, int biomarks, int subtotal, float percentage, String grade, float cgpa) {

this.sciencemarks = sciencemarks;

this.biomarks = biomarks;

this.subtotal = subtotal;

this.percentage = percentage;

this.grade = grade;

this.cgpa = cgpa;

}

public void setSciencemarks(int sciencemarks) {

this.sciencemarks = sciencemarks;

}

public void setBiomarks(int biomarks) {

this.biomarks = biomarks;

}

public void setSubtotal(int subtotal) {

this.subtotal = subtotal;

}

public void setPercentage(float percentage) {

this.percentage = percentage;

}

public void setGrade(String grade) {

this.grade = grade;

}

public void setCgpa(float cgpa) {

this.cgpa = cgpa;

}

public int getSciencemarks(int scimarks) {

return sciencemarks;

}

public int getBiomarks() {

return biomarks;

}

public int getSubtotal() {

return subtotal;

}

public float getPercentage() {

return percentage;

}

public String getGrade() {

return grade;

}

public float getCgpa() {

return cgpa;

}

public int allsubtotal(){

subtotal=sciencemarks\*biomarks;

return subtotal;

}

public float per(){

int i=allsubtotal();

percentage=allsubtotal()/100;

return percentage;

}

public float gradeSt(){

float j=per();

if(j>=90.00){

System.*out*.println("A+ grade");

} else if (j<=90.00) {

System.*out*.println("A grade");

}

return j;

}

public float cgpa(){

if(gradeSt()>=90.00){

System.*out*.println("cgpa is above 3.80");

}else {

System.*out*.println("cgpa is below 3.50");

}

return cgpa;

}

@Override

public String toString() {

return "StudentProgress{" +

"sciencemarks=" + sciencemarks +

", biomarks=" + biomarks +

", subtotal=" + subtotal +

", percentage=" + percentage +

", grade=" + gradeSt() +

", cgpa=" + cgpa()+

'}';

}

}