```java
package my;
import java.util.Scanner;

public class Student {
	private String name;
	private int [] grades;

	public Student( String sName, int size ) {
		name   = new String( sName );
		grades = new int[ size ];
	}

	public void fillGrades() {
		Scanner key = new Scanner(System.in);
		System.out.println("Enter " + grades.length + " grades: ");
		for (int j = 0; j < grades.length; j++) {
			System.out.print("Grade " + j + " : ");
			grades[ j ] = key.nextInt();
		}
	}

	public void display( ) {
		System.out.println("Student Name: " + name);
		System.out.print("Grades: ");
		for (int j = 0; j < grades.length; j++)
			System.out.print( grades[ j ] + ", " );
		System.out.println();
	}

	public double average() {
		double sum = 0.0;
		for (int j = 0; j < grades.length; j++)
			sum += grades[ j ];
		return sum/grades.length;
	}

	public int max() {
		int m = grades[ 0 ];
		for (int j = 1; j < grades.length; j++)
			if (grades[ j ] > m)
				m = grades[ j ];
		return m;
	}

	public void bonus(int b) {
		for (int j = 0; j < grades.length; j++)
			grades[ j ] += b;
	}

	public void copyTo(Student s) {
		s.name = name;
		for (int j = 0; j < grades.length; j++)
			s.grades[ j ] = grades[ j ];
	}

	public int location(int x){
		for (int j = 0; j < grades.length; j++)
```

```
                if (grades[ j ] == x)
                      return j;
          return -1;
      }
}
//--------------------------------------------------------------------------------
package my;
import java.util.Scanner;

public class TestStudent {

      public static void main(String [] args) {
            Scanner scan = new Scanner(System.in);

            System.out.print("How many grades per student: ");
            int n = scan.nextInt();
            Student s1 = new Student("Ahmed", n);
            Student s2 = new Student("Jamal", n);
            Student s3 = new Student("Salim", n);
            s1.fillGrades();
            s2.fillGrades();
            s1.copyTo(s3);
            System.out.print("Ahmed Grades: ");
            s1.display();
            System.out.print("Jamal Grades: ");
            s2.display();
            System.out.print("Salim Grades: ");
            s3.display();

            System.out.println("The avearge of Ahmed =" + s1.average()
);

            s3.bonus(20);
            System.out.print("Salim Grades after 20 bonus: ");
            s3.display();

            int loc = s1.location(90);
            if (loc == -1)
                  System.out.println("Ahmed did NOT score 90.");
            else
                  System.out.println("Ahmed score 90 as the " + loc + "
grade");

            System.out.println("The best grade for Jamal = " +
s2.max());

      }

}
```