REPORT TITLE 2018

MAY 4

COMPANY NAME

Authored by: Your Name

Logo Name

Contents

Group Activity 6

- Due **Oct 14, 2020 at 11:59pm**
- Points **30**
- Questions **1**
- Available **Oct 6, 2020 at 8am - Oct 14, 2020 at 11:59pm** **9 days**
- Time Limit **None**
- Allowed Attempts **10**

This quiz was locked Oct 14, 2020 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	**142 minutes**	**27 out of 30**

Score for this attempt: 27 **out of 30**
Submitted Oct 6, 2020 at 10:36am
This attempt took 142 minutes.

Question 1

27 / 30 pts

1.

Create a class named Student that has fields for an ID number, number of credit hours earned, and number of points earned. (For example, many schools compute grade point averages based on a scale of 4, so a three-credit-hour class in which a student earns an A is worth 12 points.) Include methods to assign values to all fields. A Student also has a field for grade point average. Include a method to compute the grade point average field by dividing points by credit hours earned. Write methods to display the values in each Student field. Save this class as Student.java.

2.

Write a class named ShowStudent that instantiates a Student object from the class you created and assign values to its fields. Compute the Student grade point average, and then display all the values associated with the Student. Save the application as ShowStudent.java.

3.

Create a constructor for the Student class you created. The constructor should initialize each Student's ID number to 9999, his or her points earned to 12, and credit hours to 3 (resulting in a grade point average of 4.0). Write a program that demonstrates that the constructor works by instantiating an object and displaying the initial values. Save the application as ShowStudent2.java.

Your Answer:

instruction 1

//class student

```
package group.act.pkg6;
/**
*
* @author albert michael ludick
*/
```

```
public class Student {
private String IDNumber;
private int numberOfCreditHoursEarned;
private int numberOfPointsEarned;
private int gradePointAverage;
/**
* @param IDNumber the IDNumber to set
*/
public void setIDNumber(String IDNumber) {
this.IDNumber = IDNumber;
}
/**
* @param numberOfCreditHoursEarned the numberOfCreditHoursEarned to set
*/
public void setNumberOfCreditHoursEarned(int numberOfCreditHoursEarned) {
this.numberOfCreditHoursEarned = numberOfCreditHoursEarned;
}
/**
* @param numberOfPointsEarned the numberOfPointsEarned to set
*/
public void setNumberOfPointsEarned(int numberOfPointsEarned) {
this.numberOfPointsEarned = numberOfPointsEarned;
}
/**
* this method calculates the grade point average of the student
*/
public void CalculateGradePointAvarage(){
gradePointAverage=numberOfPointsEarned/numberOfCreditHoursEarned;
}
/**
* writes id number to console window
*/
public void getIDNumber() {
System.out.println("this is the student ID number "+IDNumber);
}
/**
* writes hours of credits earned to console window
*/
public void getNumberOfCreditHoursEarned() {
System.out.println("this is the student amount of credit hours earned "
+numberOfCreditHoursEarned);
}
/**
* writes number of points earned to console window
*/
public void getNumberOfPointsEarned() {
System.out.println("this is the student amount of points earned "
+numberOfPointsEarned);
```

```
}
/**
* writes grade point average to console window
*/
public void getGradePointAverage() {
System.out.println("this is the student grade point average "
+ gradePointAverage);
}
/**
* writes all student data to console window
*/
public void WriteAllData(){
getIDNumber();
getNumberOfCreditHoursEarned();
getNumberOfPointsEarned();
getGradePointAverage();
}
}
```

Instruction 2

```
//class ShowStudent

package group.act.pkg6;
/**
*
* @author albert michael ludick
* Instruction or question 2 of group activity 6
*/
public class ShowStudent {
/**
* this class makes a new student and it initializes it with values
*/
public static void MakeNewStudent(){
Student newStudent = new Student();
newStudent.setIDNumber("1234");
newStudent.setNumberOfPointsEarned(15);
newStudent.setNumberOfCreditHoursEarned(5);
newStudent.CalculateGradePointAvarage();
WriteAllData(newStudent);
}
/**
* this writes all the student data to console window
* @param newStudent
*/
private static void WriteAllData(Student newStudent){
newStudent.getIDNumber();
newStudent.getNumberOfCreditHoursEarned();
newStudent.getNumberOfPointsEarned();
```

```
newStudent.getGradePointAverage();
}
}
```

//class group activity 6

```
package group.act.pkg6;
/**
*
* @author albert michael ludick
*/
public class GroupAct6 {

/**
* @param args the command line arguments
*/
public static void main(String[] args) {
// this is instruction number 2 or qeustion 2 of
// group activity 6
ShowStudent.MakeNewStudent();
// this is instruction number 3 or qeustion 3 of
// group activity 6
//ShowStudents2.MakeNewStudent2();
}
}
```

Instruction 3

//class student

```
package group.act.pkg6;
/**
*
* @author albert michael ludick
*/
public class Student {
private String IDNumber;
private int numberOfCreditHoursEarned;
private int numberOfPointsEarned;
private int gradePointAverage;
Student(){
this.IDNumber="9999";
numberOfPointsEarned=12;
numberOfCreditHoursEarned=3;
}
/**
* @param IDNumber the IDNumber to set
*/
public void setIDNumber(String IDNumber) {
this.IDNumber = IDNumber;
```

```
}
/**
* @param numberOfCreditHoursEarned the numberOfCreditHoursEarned to set
*/
public void setNumberOfCreditHoursEarned(int numberOfCreditHoursEarned) {
this.numberOfCreditHoursEarned = numberOfCreditHoursEarned;
}
/**
* @param numberOfPointsEarned the numberOfPointsEarned to set
*/
public void setNumberOfPointsEarned(int numberOfPointsEarned) {
this.numberOfPointsEarned = numberOfPointsEarned;
}
/**
* this method calculates the grade point average of the student
*/
public void CalculateGradePointAvarage(){
gradePointAverage=numberOfPointsEarned/numberOfCreditHoursEarned;
}
/**
* writes id number to console window
*/
public void getIDNumber() {
System.out.println("this is the student ID number "+IDNumber);
}
/**
* writes hours of credits earned to console window
*/
public void getNumberOfCreditHoursEarned() {
System.out.println("this is the student amount of credit hours earned "
+numberOfCreditHoursEarned);
}
/**
* writes number of points earned to console window
*/
public void getNumberOfPointsEarned() {
System.out.println("this is the student amount of points earned "
+numberOfPointsEarned);
}
/**
* writes grade point average to console window
*/
public void getGradePointAverage() {
System.out.println("this is the student grade point average"
+ gradePointAverage);
}
/**
* writes all student data to console window
```

```
*/
public void WriteAllData(){
getIDNumber();
getNumberOfCreditHoursEarned();
getNumberOfPointsEarned();
getGradePointAverage();
}
}

//class ShowStudent2
package group.act.pkg6;

/**
*
* @author albert michael ludick
*/
public class ShowStudents2 {
/**
* this methods uses the default constructor to initialize values
* for the student class and then displays all data
*/
public static void MakeNewStudent2(){
Student newStudent = new Student();

newStudent.CalculateGradePointAvarage();
newStudent.WriteAllData();
}
}

//class GroupAct6

package group.act.pkg6;
/**
*
* @author albert michael ludick
*/
public class GroupAct6 {

/**
* @param args the command line arguments
*/
public static void main(String[] args) {
// this is instruction number 2 or qeustion 2 of
// group activity 6
//ShowStudent.MakeNewStudent();
// this is instruction number 3 or qeustion 3 of
// group activity 6
ShowStudents2.MakeNewStudent2();
}
}
```

working just with instruction 2 to get output

output=

```java
package group.act.pkg6;
/**
 *
 * @author albert michael ludick
 */
public class GroupAct6 {

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        // this is instruction number 2 or qeustion 2 of
        // group activity 6
        ShowStudent.MakeNewStudent();
        // this is instruction number 3 or qeustion 3 of
        // group activity 6
//          ShowStudents2.MakeNewStudent2();
    }
}
```

and

console

```
run:
this is the student ID number 1234
this is the student amount of credit hours earned 5
this is the student amount of points earned 15
this is the student grade point average 3
BUILD SUCCESSFUL (total time: 0 seconds)
```

working just with instruction 2 to get output

output =

code

```java
package group.act.pkg6;
/**
 *
 * @author albert michael ludick
 */
public class GroupAct6 {

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        // this is instruction number 2 or qeustion 2 of
        // group activity 6
//          ShowStudent.MakeNewStudent();
        // this is instruction number 3 or qeustion 3 of
        // group activity 6
        ShowStudents2.MakeNewStudent2();
    }
}
```

console window

```
run:
this is the student ID number 9999
this is the student amount of credit hours earned 3
this is the student amount of points earned 12
this is the student grade point average 4
BUILD SUCCESSFUL (total time: 0 seconds)
```

Quiz Score: 27 **out of 30**