JD521 Summitive

6955 Laikin Barnard

Contents

Question:

Create a two-dimensional array of type double to contain the three different SD Marks (JD521, PRG521, and IP521) for six different students. A single array of type String must be used to store the student names (Maxwell, Carl, Gerhard, Paul, James, and Cena).

Allow a user to enter in a number, ranging from 1 to 6, which will represent the student position in the table MCSD max and present the marks for each respecting module. The program can only stop when the user enter a number greater than 6.

Printout the student name including the JD521, PRG521, and IP521 max, the total of marks and the average of all marks. Use a condition statement to decide that the student has passed or not (Pass rate is 70).

Student name	JD521	PRG521	IPG521
Maxwell	80	65	70
Carl	95	70	65
Gerhard	87	80	73
Paul	65	45	60
James	45	87	65

Code:

```
/*Laikin Barnard 6955*/

package Question21;

import javax.swing.*;

public class Question21_6955 {

   public static void main(String[] args) {

      // Names Single array declaration

      String[] ArrNames = {"Maxwell", "Carl", "Gerhard", "Paul", "James", "Cena"};


      // SDMarks Multidimensional array declaration

      String[] module = {"JD521","PRG521","IP521"};

      double[][] ArrSDMarks = {

      {80, 65, 70},

      {95, 70, 65},

      {87, 80, 73},

      {65, 45, 60},

      {45, 87, 65},

      {90, 50, 70}

      };


      //Calculates number of rows and columns present in given array

      int sumRow = 0;

      int m =Integer.parseInt( JOptionPane.showInputDialog("Which student marks do you wanna see? "));

      System.out.println(ArrNames[m-1]+ " Your grades are as follows: ");

      for (int i = 0; i <6; i++){

         for (int z = 0; z < 3; z++){

            if ( i == m-1 ){

            System.out.println(module[z]+ " : "+ArrSDMarks[i][z]);

            sumRow += ArrSDMarks[i][z];
```

```
            }
          }
        }

        // Avg and Mark Total
        double Total = sumRow;
        double Avg = Total*0.3;
        System.out.println("Your total mark out of 300 is : " + Total);
        System.out.println("Your Avrage mark is : " + Avg);
        // Conditioning to determine a pass or fail.
        if (Avg >= 70) {
           System.out.println("You pass!");
        }
        else {
           System.out.println("You failed...");
        }
     }


}
```

Solution:

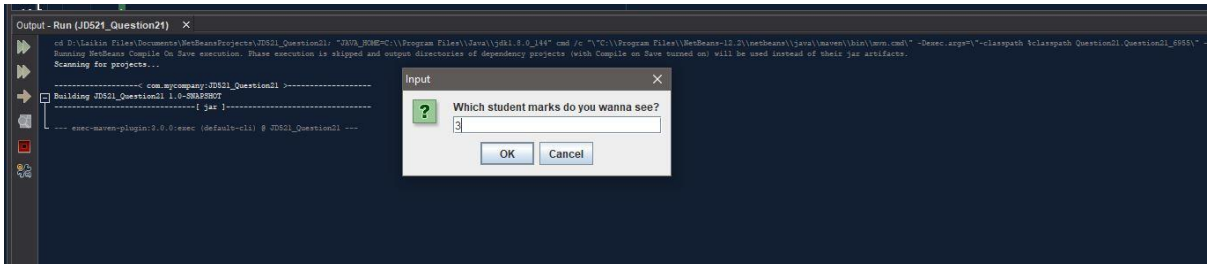
Question21_6955.java

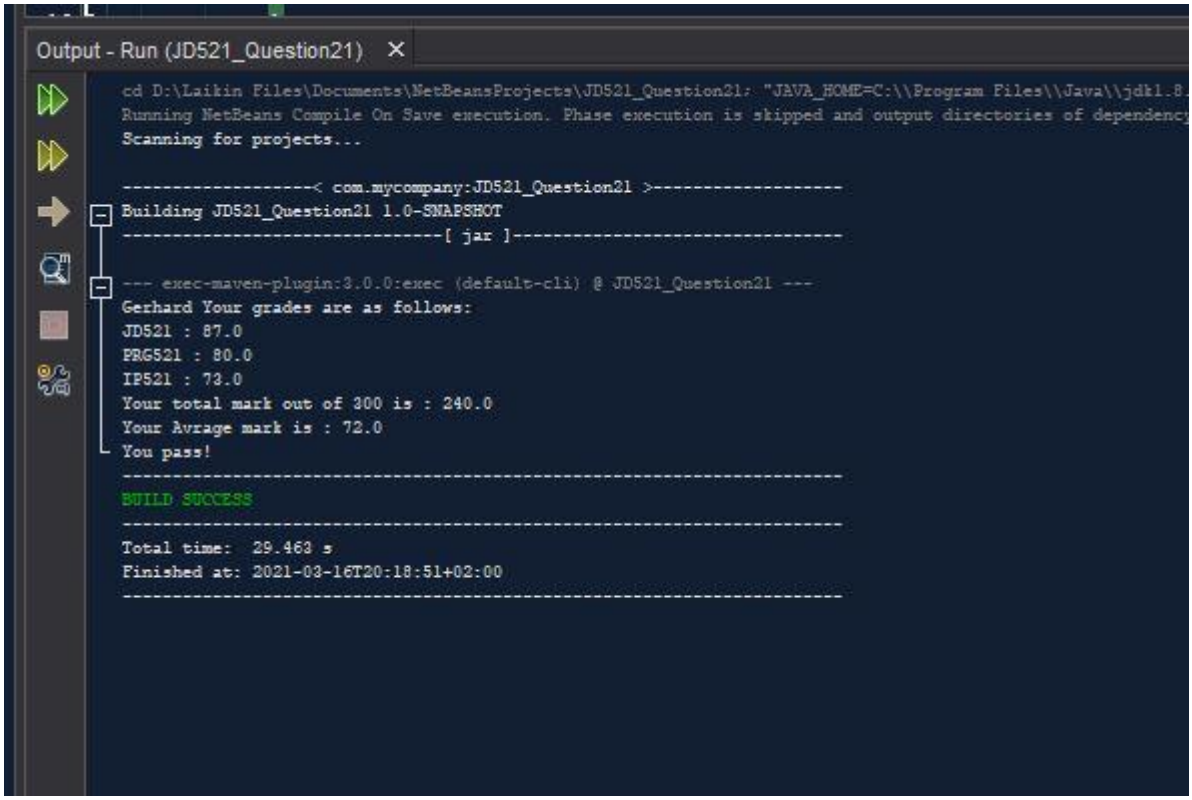
Source | History

```java
/*Laikin Barnard 6955*/
package Question21;
import javax.swing.*;
public class Question21_6955 {
    public static void main(String[] args) {
        // Names Single array declaration
        String[] ArrNames = {"Maxwell", "Carl", "Gerhard", "Paul", "James", "Cena"};

        // SDMarks Multidimensional array declaration
        String[] module = {"JD521","PRG521","IP521"};
        double[][] ArrSDMarks = {
        {80, 65, 70},
        {95, 70, 65},
        {87, 80, 73},
        {65, 45, 60},
        {45, 87, 65},
        {90, 50, 70}
        };

        //Calculates number of rows and columns present in given array
        int sumRow = 0;
        int m =Integer.parseInt( JOptionPane.showInputDialog("Which student marks do you wanna see? "));
        System.out.println(ArrNames[m-1]+ " Your grades are as follows: ");
        for (int i = 0; i <6; i++){
            for (int z = 0; z < 3; z++){
                if ( i == m-1 ){
                System.out.println(module[z]+ " : "+ArrSDMarks[i][z]);
                sumRow += ArrSDMarks[i][z];
                }
            }
        }

        // Avg and Mark Total
        double Total = sumRow;
        double Avg = Total*0.3;
        System.out.println("Your total mark out of 300 is : " + Total);
        System.out.println("Your Avrage mark is : " + Avg);
        // Conditioning to determine a pass or fail.
        if (Avg >= 70) {
            System.out.println("You pass!");
        }
        else {
            System.out.println("You failed...");
        }
    }

}
```

Result:

Passing result:





Failing result: