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1  /* Gross Pay, Savings, and Investment Calculator using JOption for I/O.
2     This Programs purpose is to calculate gross pay, savings, and investment based
3     off of user input in a JOption panel, and be output in a JOption panel.
4     Zachary Stall
5     Program #3, CS 1050, Section 3
6     jGrasp, Custom PC, Windows 10
7     Feckless - ineffective; incompetent; futile
8     "Absence of evidence is not evidence of absence." -Carl Sagan (1934 - 1996)
9  */
10
11 import javax.swing.JOptionPane; // This class is used in this assignment to print panels.
12 import java.text.DecimalFormat; // This class is used to format outputs into percents, deci
13 import java.util.StringTokenizer; // This class is used to allow users to input int or doub
14
15 public class Zachary_2_03{
16
17     public static void main (String [] args){
18
19         double grossPay = 0.0;           // Gross pay
20         double savingRate = 0.0;         // Saving rate as a percentage
21         double iraRate = 0.0;            // IRA investment rate as a percentage
22         double saveAmount = 0.0;         // Calculated savings amount
23         double iraAmount = 0.0;          // Calculated IRA amount
24         double saveIraCombined = 0.0;    // saving plus ira accounts
25
26         String inputStr;                  // Sting that will print the initial message to the
27         StringTokenizer eachVarEntered;    // Will store inputs from user to calculate outputs
28
29         DecimalFormat grossPayForm;        //Does the Decimal var need a different name than
30         DecimalFormat savingRateForm;      //Does this belong at this point in the code?
31         DecimalFormat iraPercentForm;
32         DecimalFormat saveAmountForm;
33         DecimalFormat iraAmountForm;
34         DecimalFormat saveIraCombinedForm;
35
36
37         /*
38         JOptionPane.showInputDialog will print the message in a dialog box
39         and allow the user to input values.
40         StringTokenizer will take the input from the user and store the
41         values in eachVarEntered, where the nextToken will take the values
42         and store them into each double var below, and know that the
43         values are seperated by spaces.
44         */
45
46         inputStr = JOptionPane.showInputDialog("Enter gross pay, savings rate and IRA rate se
47         eachVarEntered = new StringTokenizer(inputStr); // tokenizer will take the input valu
48         grossPay = Double.parseDouble(eachVarEntered.nextToken()); // Double.parsedouble conv
49         savingRate = Double.parseDouble(eachVarEntered.nextToken());
50         iraRate = Double.parseDouble(eachVarEntered.nextToken());
51
52         /*
53         This section of code calculates the amount of savings, IRA
54         investment, and combined total of both accounts and assigns
55         them to new var to be used later.
56         */
57
58         saveAmount = ((savingRate / 100) * grossPay); //does this keep the correct amount
59         iraAmount = ((iraRate / 100) * grossPay);
60         saveIraCombined = saveAmount + iraAmount;

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61
62      /*
63      Assigning a DecimalFormat to the to the var below, so that the
64      program can take grossPay, format it, and then store it in a
65      string to be printed later.
66      */
67
68      //move DecimalFormat's back to here if everthing goes crazy!!!
69
70      grossPayForm = new DecimalFormat("###,000.00");
71      savingRateForm = new DecimalFormat("#0.00");
72      iraPercentForm = new DecimalFormat("#0.00");
73      saveAmountForm = new DecimalFormat("###,000.00");
74      iraAmountForm = new DecimalFormat("###,000.00");
75      saveIraCombinedForm = new DecimalFormat("###,000.00");
76
77      String formattedGrossPay = grossPayForm.format(grossPay);
78      String formatedSavingRate = savingRateForm.format(savingRate);
79      String formatedIraRate = iraPercentForm.format(iraRate);
80      String formatedSaveAmount = saveAmountForm.format(saveAmount);
81      String formatedIraAmount = iraAmountForm.format(iraAmount);
82      String formatedCombinedAccounts = saveIraCombinedForm.format(saveIraCombined);
83
84      /*
85      JOptionPane.showMessageDialog will print all the values in a
86      new pane for the user to see.
87      */
88
89      JOptionPane.showMessageDialog(null, "Gross pay: $" + formattedGrossPay + " Savings P
ercent: " + formatedSavingRate + "%"
90          + " Savings IRA: " + formatedIraRate + "% \n"
91          + "Amount in Savings: $" + formatedSaveAmount + " \n "
92          + "Amount in IRA: $" + formatedIraAmount + " \n "
93          + "Amount in both accounts: $" + formatedCombinedAccounts);
94
95
96
97      System.out.println("Zachary Stall");
98
99
100     System.exit(0);
101 }
102 }

```