Homework Turnin

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Section:	AS
Course:	CSE 142 19au
Assignment:	a4
Receipt ID:	72fd42c81f01bc9c54b37fac841bd6b0

Turnin Successful!

The following file(s) were received:

Budgeter.java   (3385 bytes, sha256: 1a15bae38ed419587c22f6efa131ab5

```java
1.  // Xuqing Wu
2.  // 10/19/2019
3.  // CSE142
4.  // TA: Ethan M Knutson
5.  // Assignment #4
6.  //
7.  // This program will show net income.
8.
9.  // scanner concole: get response from users
10. // totalIncome: the monthly income user types in
11. // choice: the monthly or daily choice
12. // totalExpense: the monthly or daily expense user types in
13. // expenseTotal: the monthly expense
14.
15. import java.util.*;
16. public class Budgeter{
17.     public static final int DAYS = 31;
18.     public static void main(String[] args){
19.         Scanner console = new Scanner(System.in);
20.         intro();
21.         double totalIncome = money(console, "income");
22.         int choice = choice(console);
23.         double totalExpense = money(console, "expense");
24.         double expenseTotal = print(choice, totalExpense, totalIncome);
25.         compare(totalIncome, expenseTotal);
26.     }
27.
28.     //round numbers to two decimal places
29.     public static double round(double num){
30.         return Math.round(num*100)/100.0;
31.     }
```

```java
32.
33.       //print the introduction of the programe
34.       public static void intro(){
35.          System.out.println("This program asks for your monthly income and ");
36.          System.out.println("expenses, then tells you your net monthly income.");
37.          System.out.println();
38.       }
39.
40.       //get the total income and expense values
41.       public static double money(Scanner console, String money){
42.          System.out.print("How many categories of " + money + "? ");
43.          int numCate = console.nextInt();
44.          double total = 0;
45.          for(int i=0; i<numCate; i++){
46.             System.out.print("    Next "+ money + " amount? $");
47.             double single  = console.nextDouble();
48.             total += single;
49.          }
50.          System.out.println();
51.          return total;
52.       }
53.
54.       //get choice of monthly or daily
55.       public static int choice(Scanner console){
56.          System.out.print("Enter 1) monthly or 2) daily expenses? ");
57.          int choice = console.nextInt();
58.          return choice;
59.       }
60.
61.       //print total and daily income and expense
62.       public static double print(int choice, double total, double inTot){
63.          double exTot;
64.          double exDay;
65.          if(choice == 1){
66.             exTot = total;
67.             exDay = total/DAYS;
68.          }
69.          else{
70.             exTot = total*DAYS;
71.             exDay = total;
72.          }
73.          double inDay = inTot/DAYS;
74.          System.out.println("Total income = $" + round(inTot) + " ($" + round(inDa
75.          System.out.println("Total expenses = $" + round(exTot) + " ($" + round(ex
76.          System.out.println();
77.          return exTot;
78.       }
79.
80.       //compare the income and expense, and give comments
81.       public static void compare(double in, double out){
82.          double d = in - out;
83.          String b = "saver";
84.          String a = "more";
85.          if(d>0){
86.             if(d>250){
87.                b = "big saver";
88.                a = "much more";
89.             }
90.             System.out.println("You earned $" + round(d) + " more than you spent t
91.             System.out.println("You're a " + b + ".");
92.             System.out.println("You may spend " + a + ".");
93.          }else{
94.             if(d<-250){
95.                b = "big spender";
```

```java
 96.              a = "much less";
 97.          }else{
 98.              b = "spender";
 99.              a = "less";
100.          }
101.          System.out.println("You spent $" + round(Math.abs(d)) + " more than yo
102.          System.out.println("You're a " + b + ".");
103.          System.out.println("You must spend " + a + ".");
104.      }
105.  }
106. }
```