JAVA ASSIGNMENT

Java Assignment 2.5 – Change Maker

Ver 2.0 Last Updated: 3/26/2021 1:50 PM

Change for a 20

a. Assuming someone has a bill <= $20, Figure out how many tens, fives, ones, quarters, dimes, nickels and pennies would be given back

b. Examples include
   i. 15.73 -> 4 one(s), 1 quarter(s), two pennies
   ii. 3.67 -> 1 ten, 1 five(s), 1 one(s), 1 quarter(s), 1 nickel and three pennies
   iii. 8.91 -> 1 ten, 1 one(s), 1 nickel and four pennies

c. NOTE: Suppress any bills or coins not present

d. BONUS: Print appropriate words for bills and coins, example 2 ones or 1 one and 3 pennies but 1 penny

There are some helpful tools you can use to share code;
   i. codeshare.io you can see what the other person types, etc. but cannot execute code here

ii. Jdoodle.com You can peer share a project and execute java code here

iii. repl.it You can code on the same project together

iv. codiva.io unsure of the sharing possibilities with this website

v. Example Output

Cost is 0.34
Your change is 19.66

Your change is
1 ten
1 five
4 ones
2 quarters
1 dime
1 nickel
1 penny

Cost is 0.76
Your change is 19.24

Your change is
1 ten
1 five
4 ones
2 dimes
4 pennies

Project Name	Assign 2 5 Change Calc
Class1 Name	ChangeCalculator

Rubric	
Change Program	35
Comments	5
TOTAL	40

How to help mr. Hanley get set to test your change for a twenty batch file.

In order to test your program efficiently, we will be adding commands to your main method and copying two text files into your project folder.

These text files, in1.txt and in2.txt have a price on each line that the computer will read in as an input.

Instead of printing the results to the screen, the program will create a text file and store the outputs in the text file.

mr Hanley will grade each of these in order to see if your logic works correctly.

Here are the steps to getting things set up.

1. **Copy the following code into the beginning of your main.(If the computer asks you to add imports, do it)**

```
//Added by Hanley

    String inFileName = "in1.txt";
    String outFiName = "out1.txt", team = "Justin and Ben T", per = "4";
    System.out.println("Redirecting input -> " + inFileName);
    System.out.println("Redirecting output -> " + outFiName);
    //Redirect the input
    try {
        System.setIn(new FileInputStream(new File(inFileName)));
    } catch (FileNotFoundException e) {
        System.out.println("File Problem " + e);
    }
    //Redirecting console output to file (System.out.println)
    try {
        //Prepare the output file
        PrintStream fileStream = new PrintStream(new FileOutputStream(outFiName,
false));
        System.setOut(fileStream);
    } catch (IOException e) {
        System.out.println("File Problem " + e);
    }
    //Read the data
    Scanner input = new Scanner(System.in);
```

```
    //loops all data in file
    System.out.println("_____");
    System.out.println("Team " + team + " Period " + per);
    System.out.println("Test File is :" + inFileName);

     while (input.hasNext()) {
```

2. **If the computer did not ask you for imports, right click and choose Fix Imports (the errors where things were underlined should go away!!)**
3. **Comment out where you created a scanner and any prompts to enter information**
   (Since I already created a Scanner in my code, there will be a conflict otherwise!!)

```java
public static void main(String[] args) {
    //Added by Hanley
    String inFileName = "in2.txt";
    String outFiName = "out2.txt", team = "Justin and Ben T", per = "4";
    System.out.println("Redirecting input -> " + inFileName);
    System.out.println("Redirecting output -> " + outFiName);
    //Redirect the input
    try {
        System.setIn(new FileInputStream(new File(inFileName)));
    } catch (FileNotFoundException e) {
        System.out.println("File Problem " + e);
    }
    //Redirecting console output to file (System.out.println)
    try {
        //Prepare the output file
        PrintStream fileStream = new PrintStream(new FileOutputStream(outFiName, false));
        System.setOut(fileStream);
    } catch (IOException e) {
        System.out.println("File Problem " + e);
    }
    //Read the data
    Scanner input = new Scanner(System.in);
    //loops all data in file
    System.out.println("===============================================");
    System.out.println("Team " + team + " Period " + per);
    System.out.println("Test File is :" + inFileName);


    while (input.hasNext()) {
        //Scanner - Nombre Un
        Scanner input = new Scanner(System.in); //Keybarhd Scanna
```

Need to comment this out

4. **After commenting out,**

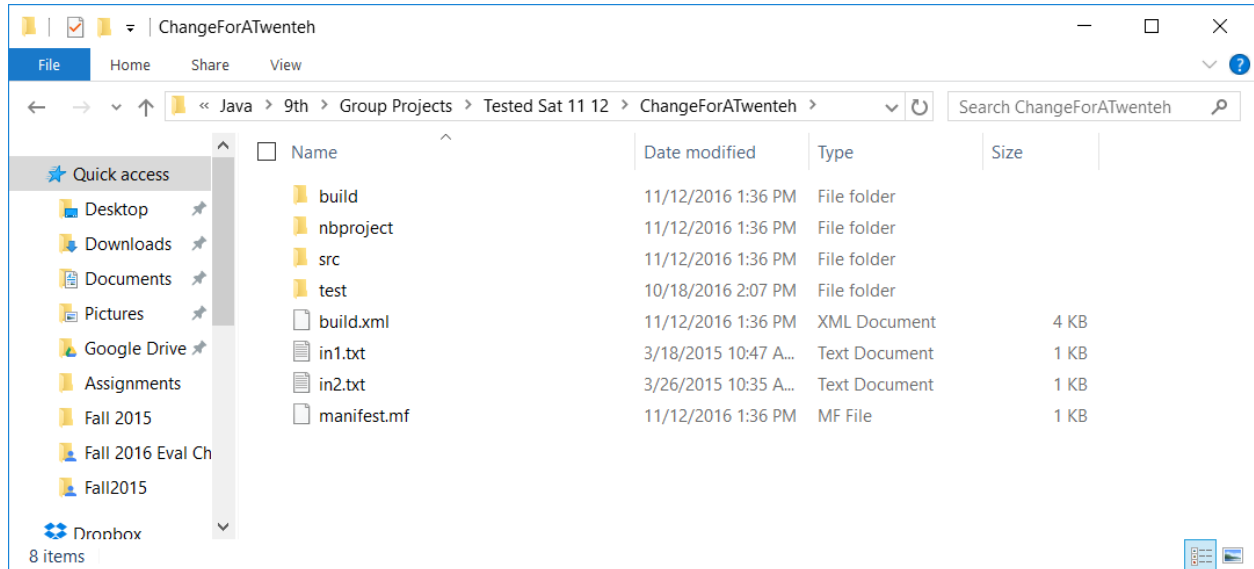5. **Find the part in your program right after you calculate the change due and paste these three lines**

System.out.println("_____");
System.out.println("Charge is " + charge);
System.out.println("Your change is " + change);

6. **This will probably result in errors as your variable names won't be the same as mine; change the charge and change variables to match whatever name variables you used (this example i**

Get rid of a prompt for them to enter data, text file will enter data

7. **Right Click and Format your code and you will find you are missing a closing curly brace at the bottom of your program. Add in the }**

8. **Copy 2 files from mr Hanley's web site into your project folder(in1.txt and in2.txt)**

9. **Edit the top of the program to reflect your names and period you have java**

```java
//Added by Hanley
String inFileName = "in1.txt";
String outFiName = "out1.txt", team = "Bud and Kaleb", per = "9";
System.out.println("Redirecting input -> " + inFileName);
System.out.println("Redirecting output -> " + outFiName);
//Redirect the input
try {
    System.setIn(new FileInputStream(new File(inFileName)));
} catch (FileNotFoundException e) {
    System.out.println("File Problem " + e);
}
//Redirecting console output to file (System.out.println)
try {
    //Prepare the output file
    PrintStream fileStream = new PrintStream(new FileOutputStream(outFiName, false));
    System.setOut(fileStream);
} catch (IOException e) {
    System.out.println("File Problem " + e);
}
//Read the data
Scanner input = new Scanner(System.in);
//loops all data in file
System.out.println("===============================================");
System.out.println("Team " + team + " Period " + per);
System.out.println("Test File is :" + inFileName);

while (input.hasNext()) {
    //Scanner - Nombre Un
```

10. **If you completed this successfully, you should be able to right click and run your program and get an out1.txt in your folder of your project. If there are a lot of things printing out, comment them out so the output file is relatively lean! This will greatly help mr Hanley to run these two batch file tests and get your project graded**

11. **Please copy the entire project folder to your group directory on the S Drive.**