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\* Unit 3 Activity 6 Program/Question 1

\* This program calculates the number of coins necessary to make change for any amount the user types in.

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import javax.swing.\*;

public class makechange

{

public static void main(String[] args)

{

//Variable Declaration and Initialization

//Remainder of...

double remToonies = 0, remLoonies = 0, remQuarters = 0, remDimes = 0, remNickels = 0, remPennies = 0;

//Number of...

double toonies = 0, loonies = 0, quarters = 0, dimes = 0, nickels = 0, pennies = 0;

double change = Double.parseDouble(JOptionPane.showInputDialog(null,"Hello and welcome to the MakeChange Machine. \nPlease enter amount in dollars.", "Input", JOptionPane.QUESTION\_MESSAGE));

remToonies = change % 2;

toonies = (change - remToonies) / 2;

remLoonies = remToonies % 1;

loonies = (remToonies - remLoonies) / 1;

remQuarters = remLoonies % 0.25;

quarters = (remLoonies - remQuarters) / 0.25;

remDimes = remQuarters % 0.10;

dimes = (remQuarters - remDimes) / 0.10;

remNickels = remDimes % 0.05;

nickels = (remDimes - remNickels) / 0.05;

remPennies = remNickels % 0.01;

pennies = (remNickels - remPennies) / 0.01;

System.out.println("There are:");

System.out.println((int) toonies + " toonies");

System.out.println((int) loonies + " loonies");

System.out.println((int) quarters + " quarters");

System.out.println((int) dimes + " dimes");

System.out.println((int) nickels + " nickels");

System.out.println((int) pennies + " pennies");

}//end main

}//endclass