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/*Description: User inputs length and width of the room. Program calculates the room area.
The program will display the total flooring area to order, wastage and the room area in m^2.
Reads input from keyboard.*/
import java.util.Scanner;
public class Main {
  public static void main(String[] args) {
    double areaCalculated; //Stores the area of the room.
    areaCalculated = areaInput(); //Collects the data from the method which holds the data.
    wastageValue(areaCalculated); //Passes areaCalculated to the method wastageValue.
    double wastageCalculated; //Stores the wastage value.
    wastageCalculated = wastageValue(areaCalculated); //Collects the data from the method which
holds the data.
    // Parameter used to pass previous data.
    finalCalculations(areaCalculated, wastageCalculated);
    System.exit(0);
  }
  /* areaInput method - User inputs length & width of room, area is then calculated using user
  value of area is returned back to main method. */
  public static double areaInput(){
    Scanner userInput = new Scanner (System.in);
    System.out.print("Enter Length (Measured in cm): ");
    double lengthEntered = userInput.nextDouble();
    System.out.print("Enter Width (Measured in cm): ");
    double widthEntered = userInput.nextDouble();
    double areaCalculation = lengthEntered * widthEntered / 10000; //Calculates area.
    return areaCalculation; //returns the area of the room back to main.
  }
  /* wastageValue method - Using parameters, I call back the area of the room so that
  I can pass it to the wasteCalculation variable in order to make a waste calculation. */
  public static double wastageValue(double areaCalculated){
    double wastageCalculation = areaCalculated * 10 / 100;
    return wastageCalculation; //Return waste calculation value back to main.
  }
  //finalCalculations Method - Displays to the user all calculations made.
  public static void finalCalculations(double areaCalculated, double wastageCalculated){
    System.out.println("Room Area: " + areaCalculated + " m^2");
    System.out.println("Wastage: " + wastageCalculated + " m^2");
    double total = areaCalculated + wastageCalculated;
    //Here I need to make sure the final answer is one dp and is rounded down by 10.
    double firstTotal = total * 10;
    int secondTotal = (int) firstTotal;
    final double finalTotal = (double) secondTotal / 10;
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//Once calculations are passed around, the final calculation is displayed.
System.out.println("Total Flooring Area to Order: " + finalTotal + " m^2.");
}
```