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CSD-402 Java for Programmers

Assignment 1.2

Code:

// Joel Atkinson, August 15,2025, Java for Programmers Assignment 1.2  
/\*  
\* The purpose of this assignment is to gather user input for an amount of water in KG, the initial temp of the water,  
\* and desired temp of the water, then calculate the amount of energy needed in Joules to heat the water to desired temp  
\*/  
  
  
import java.util.Scanner;  
  
public class HeatWaterCalculator {  
 public static void main(String[] args) {  
 //Create a Scanner object to read the user input  
 Scanner scanner = new Scanner(System.*in*);  
  
 //Prompt the user for water mass in kg  
 System.*out*.print("Enter the amount of water to be heated in kilograms: ");  
 double waterMass = scanner.nextDouble();  
  
 //Prompt the user for initial temperature in Celsius  
 System.*out*.print("Enter the initial water temperature in Celsius: ");  
 double initialTemp = scanner.nextDouble();  
  
 // Prompt user for final temperature in Celsius  
 System.*out*.print("Enter final water temperature in Celsius: ");  
 double finalTemp = scanner.nextDouble();  
  
 // Calculate the energy using formula Q = waterMass \* (finalTemp - initialTemp) \* 4184  
 double energy = waterMass \* (finalTemp - initialTemp) \* 4184;  
  
 // Display the result  
 System.*out*.println("The energy needed to heat the water to your desired temperature is " + energy + " Joules.");  
  
 // Close the Scanner  
 scanner.close();  
 }  
}

Screenshot of code running with no bugs:

A screenshot of a computer program

AI-generated content may be incorrect.