CSC-142 SU-25
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Demo-Project: Tutor Payment Calculator

Scenario

A tutoring center pays tutors based on the number of hours worked and the hourly rate. Additionally, if a tutor works more than a certain threshold (e.g., 120 hours), they receive a bonus.

Requirements

• Prompt the user for:
  - Number of hours worked
  - Hourly rate
  - Advance payment taken
• Calculate:
  - Gross pay = hours × rate
  - Bonus if hours > 120 → bonus = 5% of gross pay
  - Final pay = gross pay + bonus − advance pay
  - If the final pay is negative, display the amount the tutor owes back.

Pseudocode

```
Display "Enter the number of hours worked"
Read hours
Display "Enter hourly rate"
Read rate
Display "Enter the advance payment taken"
Read advance

grossPay = hours * rate
If hours > 120
  bonus = 0.05 * grossPay
Else
  bonus = 0

pay = grossPay + bonus - advance
Display pay
```

Java Code: TutorPaymentCalculator.java

```
import javax.swing.JOptionPane;

public class TutorPaymentCalculator {
   public static void main(String[] args) {
      String input;
      double hours, rate, advance, grossPay, bonus, finalPay;

      input = JOptionPane.showInputDialog("Enter number of hours worked:");
      hours = Double.parseDouble(input);

      input = JOptionPane.showInputDialog("Enter hourly rate:");
      rate = Double.parseDouble(input);

      input = JOptionPane.showInputDialog("Enter advance payment taken:");
      advance = Double.parseDouble(input);

      grossPay = hours * rate;

      if (hours > 120) {
         bonus = 0.05 * grossPay;
      } else {
         bonus = 0;
      }

      finalPay = grossPay + bonus - advance;

      JOptionPane.showMessageDialog(null, String.format(
         "Gross Pay: $%.2f\nBonus: $%.2f\nFinal Pay: $%.2f",
         grossPay, bonus, finalPay));

      System.exit(0);
   }
}
```