LABTASK 2

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```java
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;

public class CarTaxCalculator extends JFrame implements ActionListener {

    // Declare components
    private JLabel lblTitle, lblPrice, lblRate, lblAmount, lblTotal, lblLoan, lblMonthly;
    private JTextField txtPrice, txtRate, txtAmount, txtTotal, txtLoan, txtMonthly;
    private JButton btnCalculate, btnClear;

    public CarTaxCalculator() {
        // setting frame
        setTitle("Car Tax Calculator");
        setSize(650, 420);
        setLocationRelativeTo(null);
        setDefaultCloseOperation(EXIT_ON_CLOSE);

        // main panel
        JPanel mainPanel = new JPanel();
        mainPanel.setBorder(BorderFactory.createEmptyBorder(20, 40, 20, 40));
        mainPanel.setLayout(new GridLayout(8, 2, 10, 10));
```

```java
        // label
        lblTitle = new JLabel("Car Tax Calculator", SwingConstants.CENTER);
        lblTitle.setFont(new Font("Arial", Font.BOLD, 16));

        lblPrice = new JLabel("Car Price:");
        lblRate = new JLabel("Tax Rate (%):");
        lblAmount = new JLabel("Tax Amount:");
        lblTotal = new JLabel("Total Price:");
        lblLoan = new JLabel("Loan Term (months):");
        lblMonthly = new JLabel("Monthly Payment:");

        //Text Fields
        txtPrice = new JTextField();
        txtRate = new JTextField();
        txtAmount = new JTextField();
        txtTotal = new JTextField();
        txtLoan = new JTextField();
        txtMonthly = new JTextField();

        // Output fields supaya tak boleh diedit
        txtAmount.setEditable(false);
        txtTotal.setEditable(false);
        txtMonthly.setEditable(false);
```
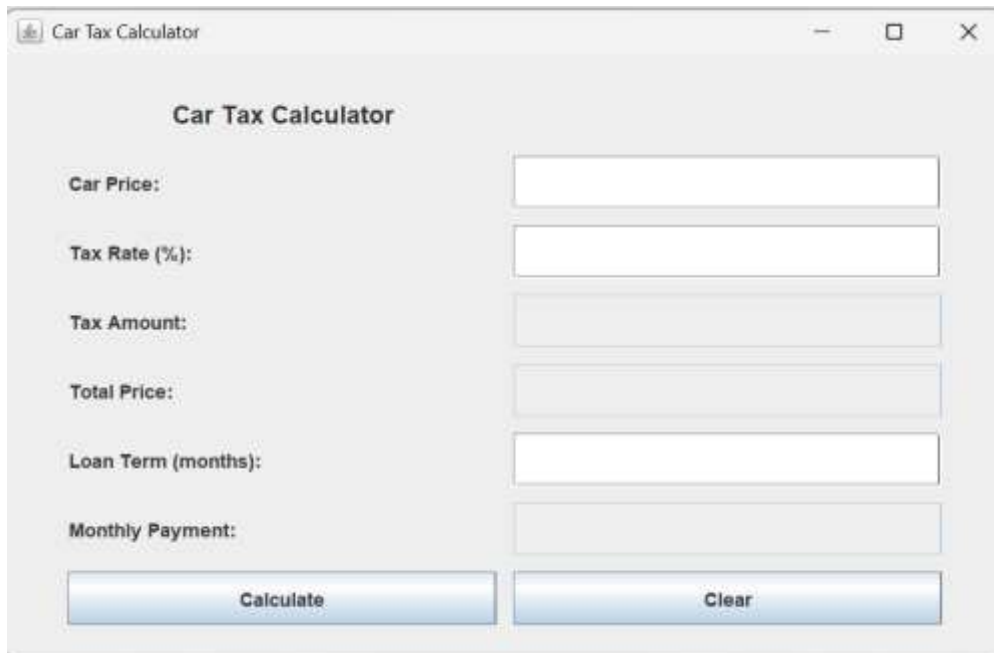
```java
        // Buttons
    btnCalculate = new JButton("Calculate");
    btnClear = new JButton("Clear");

    btnCalculate.addActionListener(this);
    btnClear.addActionListener(this);

    //Tambah semua ke mainPanel
    mainPanel.add(lblTitle);
    mainPanel.add(new JLabel("")); // kosong supaya tajuk duduk tengah

    mainPanel.add(lblPrice); mainPanel.add(txtPrice);
    mainPanel.add(lblRate); mainPanel.add(txtRate);
    mainPanel.add(lblAmount); mainPanel.add(txtAmount);
    mainPanel.add(lblTotal); mainPanel.add(txtTotal);
    mainPanel.add(lblLoan); mainPanel.add(txtLoan);
    mainPanel.add(lblMonthly); mainPanel.add(txtMonthly);
    mainPanel.add(btnCalculate); mainPanel.add(btnClear);

    // Add mainPanel ke JFrame
    add(mainPanel);

    setVisible(true);
    }

@Override
public void actionPerformed(ActionEvent e) {
    if (e.getSource() == btnCalculate) {
        try {
            double carPrice = Double.parseDouble(txtPrice.getText());
            double taxRate = Double.parseDouble(txtRate.getText());
            int loanTerm = Integer.parseInt(txtLoan.getText());

            double taxAmount = carPrice * (taxRate / 100);
            double totalPrice = carPrice + taxAmount;
            double monthlyPayment = totalPrice / loanTerm;

            txtAmount.setText(String.format("%.2f", taxAmount));
            txtTotal.setText(String.format("%.2f", totalPrice));
            txtMonthly.setText(String.format("%.2f", monthlyPayment));

        } catch (NumberFormatException ex) {
            JOptionPane.showMessageDialog(this, "⚠ Please enter valid numbers for all input fields.");
        }

    } else if (e.getSource() == btnClear) {
        txtPrice.setText("");
        txtRate.setText("");
        txtAmount.setText("");
        txtTotal.setText("");
        txtLoan.setText("");
        txtMonthly.setText("");
    }
}

public static void main(String[] args) {
    new CarTaxCalculator();
}
}
```