LAPORAN TUGAS PEKAN 8

PEMROGRAMAN GUI 1

Disusun Oleh:

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PADANG

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Operator Aritmatika Assignment

A. Pseudocode

Judul

Program Operator Aritmatika Assignment { program membuat operator aritmatika (penjumlahan, pengurangan, perkalian, pembagian, dan sisa hasil bagi) secara terus menerus }

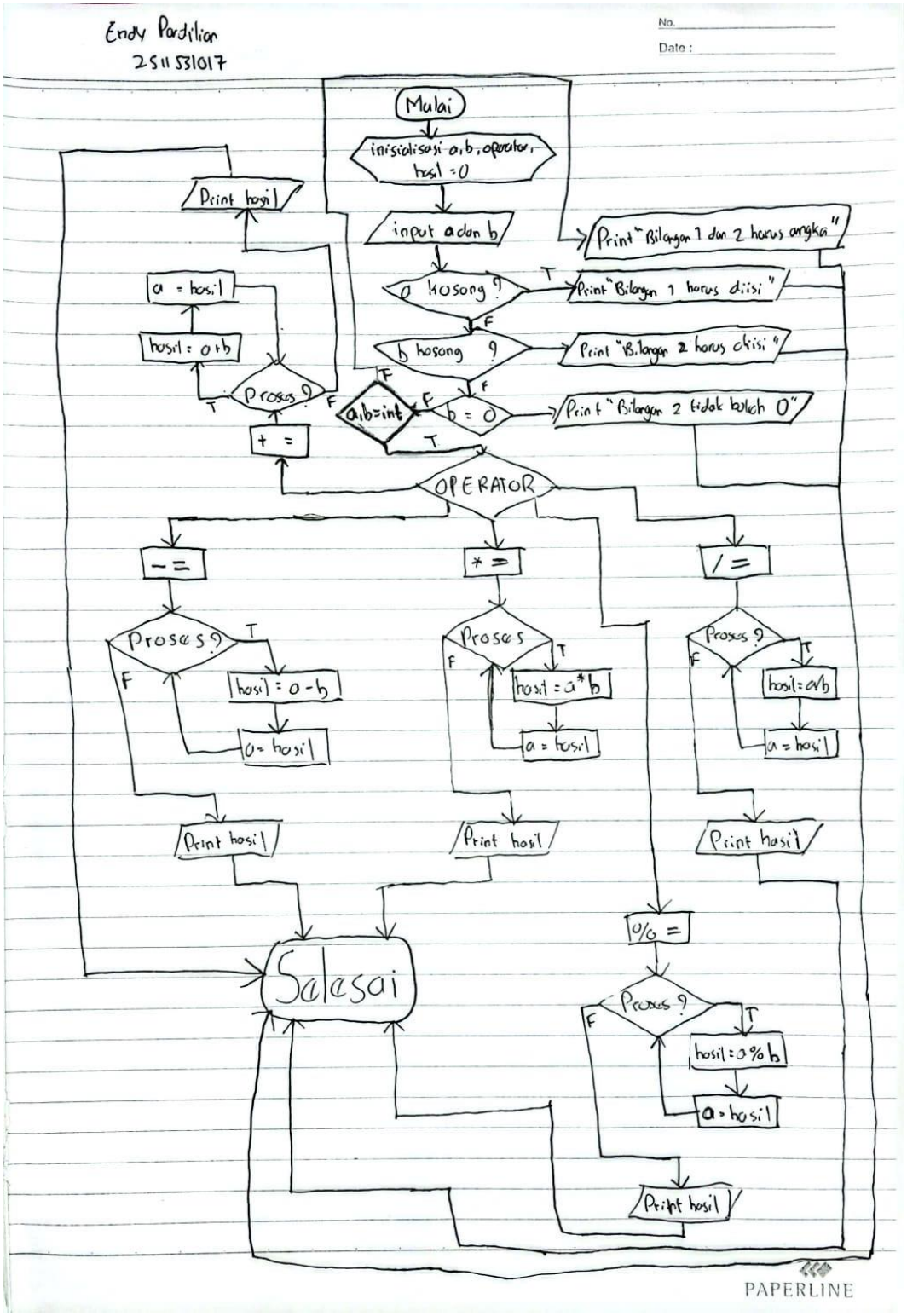
Deklarasi

1. Var a,b,hasil: integer
2. Var c : integer(operator)

Algoritma

1. Mulai
2. Input a
3. Input b
4. if (a isEmpty)
   print (“Bilangan 1 harus diisi”)
   else if (b isEmpty)
   print(“Bilangan 2 harus diisi”)
   else if(b = 0)
   print(“Bilangan 2 tidak boleh 0”)
5. try
   if (c = = 0) { hasil = a+=b}
   print hasil
   if (c = = 1) { hasil = a -=b}
   print hasil
   if (c = = 2) { hasil = a*=b}
   print hasil
   if (c = = 3) { hasil = a /=b}
   print hasil
   if (c = = 4) { hasil = a%=b}
   print hasil
   catch (NumberFormatException ex)
   print (“Bilangan 1 dan bilangan 2 harus angka”)
6. Selesai

B. Flowchart


Endy Pardilan
2511531017
No.
Date :
Mulai
inisialisasi a,b, operator, hasil = 0
input a dan b
a kosong ?
Print "Bilangan 1 harus diisi"
b kosong ?
Print "Bilangan 2 harus diisi"
a,b=int
b = 0
Print "Bilangan 2 tidak boleh 0"
Print "Bilangan 1 dan 2 harus angka"
OPERATOR
- =
* =
/ =
% =
Proses ?
hasil = a-b
a = hasil
hasil = a*b
hasil = a/b
hasil = a%b
Print hasil
Selesai
PAPERLINE

C. Source Code

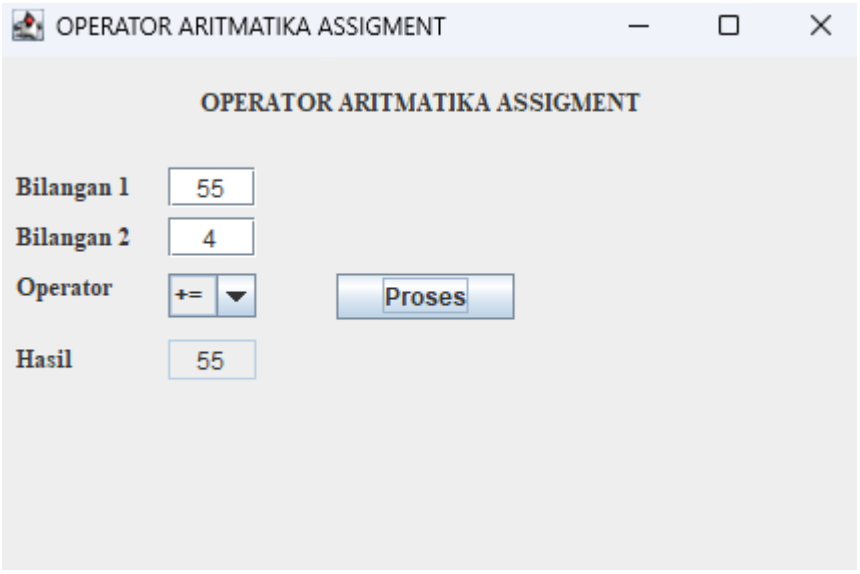
Class : TugasOperatorAritmatika_2511531017.java

```
package pekan8_2511531017;

import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import javax.swing.JOptionPane;

import java.awt.Font;
import javax.swing.JTextField;
import javax.swing.JComboBox;
import javax.swing.JButton;
import javax.swing.DefaultComboBoxModel;
import javax.swing.SwingConstants;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

public class TugasOperatorAritmatika_2511531017 extends JFrame {

	private static final long serialVersionUID = 1L;
	private JPanel contentPane;
	private JTextField txtBil1;
	private JTextField txtBil2;
	private JTextField txtHasil;

	private void pesanPeringatan(String pesan) {
		JOptionPane.showMessageDialog(this, pesan, "Peringatan",
JOptionPane.WARNING_MESSAGE);
	}
	private void pesanEror (String pesan) {
		JOptionPane.showMessageDialog(this , pesan, "Eror",
JOptionPane.ERROR_MESSAGE);
	}

	/**
	 * Launch the application.
	 */
	public static void main(String[] args) {
		EventQueue.invokeLater(new Runnable() {
			public void run() {
				try {
					TugasOperatorAritmatika_2511531017
frame = new TugasOperatorAritmatika_2511531017();
					frame.setVisible(true);
				} catch (Exception e) {
					e.printStackTrace();
				}
			}
		});
	}

	/**
	 * Create the frame.
	 */
```

```
	public TugasOperatorAritmatika_2511531017() {
		setTitle("OPERATOR ARITMATIKA ASSIGMENT");
		setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
		setBounds(100, 100, 451, 302);
		contentPane = new JPanel();
		contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
		setContentPane(contentPane);
		contentPane.setLayout(null);

		JLabel lblNewLabel = new JLabel("OPERATOR ARITMATIKA
ASSIGMENT");
		lblNewLabel.setFont(new Font("Times New Roman", Font.BOLD,
12));
		lblNewLabel.setBounds(102, 11, 229, 25);
		contentPane.add(lblNewLabel);

		JLabel lblNewLabel_1 = new JLabel("Bilangan 1");
		lblNewLabel_1.setFont(new Font("Times New Roman",
Font.BOLD, 12));
		lblNewLabel_1.setBounds(10, 58, 84, 14);
		contentPane.add(lblNewLabel_1);

		JLabel lblNewLabel_1_1 = new JLabel("Bilangan 2");
		lblNewLabel_1_1.setFont(new Font("Times New Roman",
Font.BOLD, 12));
		lblNewLabel_1_1.setBounds(10, 83, 84, 14);
		contentPane.add(lblNewLabel_1_1);

		JLabel lblNewLabel_1_1_1 = new JLabel("Operator");
		lblNewLabel_1_1_1.setFont(new Font("Times New Roman",
Font.BOLD, 12));
		lblNewLabel_1_1_1.setBounds(10, 108, 55, 14);
		contentPane.add(lblNewLabel_1_1_1);

		JLabel lblNewLabel_1_1_1_1 = new JLabel("Hasil");
		lblNewLabel_1_1_1_1.setFont(new Font("Times New Roman",
Font.BOLD, 12));
		lblNewLabel_1_1_1_1.setBounds(10, 144, 55, 14);
		contentPane.add(lblNewLabel_1_1_1_1);

		txtBil1 = new JTextField();
		txtBil1.setHorizontalAlignment(SwingConstants.CENTER);
		txtBil1.setBounds(86, 55, 44, 20);
		contentPane.add(txtBil1);
		txtBil1.setColumns(10);

		txtBil2 = new JTextField();
		txtBil2.setHorizontalAlignment(SwingConstants.CENTER);
		txtBil2.setBounds(86, 80, 44, 20);
		contentPane.add(txtBil2);
		txtBil2.setColumns(10);

		JComboBox cbOperator = new JComboBox();
		cbOperator.setModel(new DefaultComboBoxModel(new String[]
{"+=", "-=", "*=", "/=", "%="}));
		cbOperator.setBounds(86, 108, 44, 22);
		contentPane.add(cbOperator);
```

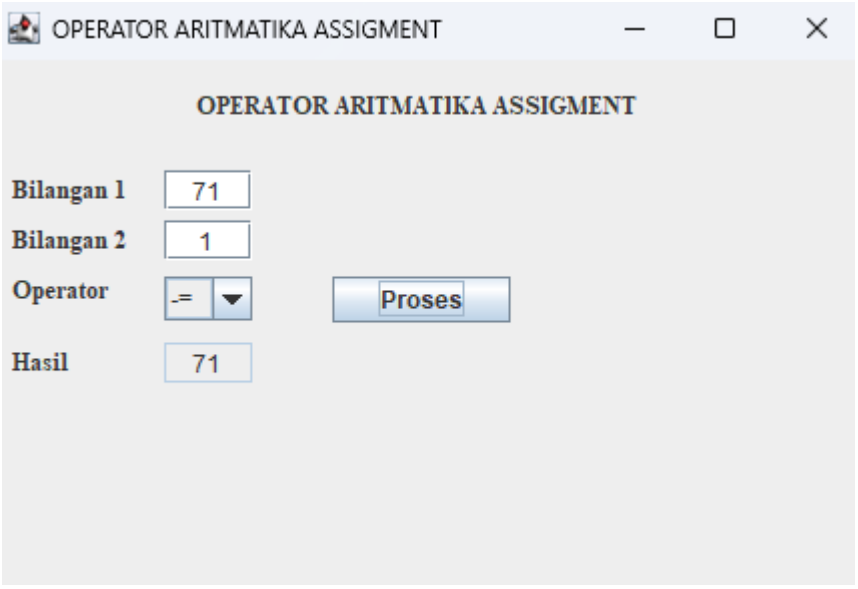
```
		txtHasil = new JTextField();
		txtHasil.setHorizontalAlignment(SwingConstants.CENTER);
		txtHasil.setEditable(false);
		txtHasil.setBounds(86, 141, 44, 20);
		contentPane.add(txtHasil);
		txtHasil.setColumns(10);

		JButton btnNewButton = new JButton("Proses");
		btnNewButton.addActionListener(new ActionListener() {
			int hasil;
		public void actionPerformed(ActionEvent e) {
			if(txtBil1.getText().trim().isEmpty()){
				pesanPeringatan("Bilangan 1 harus diisi");
			} else if (txtBil2.getText().trim().isEmpty()) {
				pesanPeringatan("Bilangan 2 harus diisi");
			}else if (txtBil2.getText().trim().startsWith("0")){
				pesanPeringatan("Bilangan 2 tidak boleh 0");
			}
			{
				try {
					int a=
Integer.parseInt(txtBil1.getText());
					int b=
Integer.parseInt(txtBil2.getText());
					int c= cbOperator.getSelectedIndex();
					if(c==0) {hasil= a+=b;}
					if(c==1) {hasil= a-=b;}
					if(c==2) {hasil= a*=b;}
					if(c==3) {hasil= a/=b;}
					if(c==4) {hasil= a%=b;}

					txtHasil.setText(String.valueOf(a));
					txtBil1.setText(String.valueOf(a));

				}catch (NumberFormatException ex) {
					pesanEror("Bilangan 1 dan Bilangan 2
harus angka");
				}
			}

			}
		});

		btnNewButton.setBounds(170, 108, 89, 23);
		contentPane.add(btnNewButton);

	}
}
```

Output:



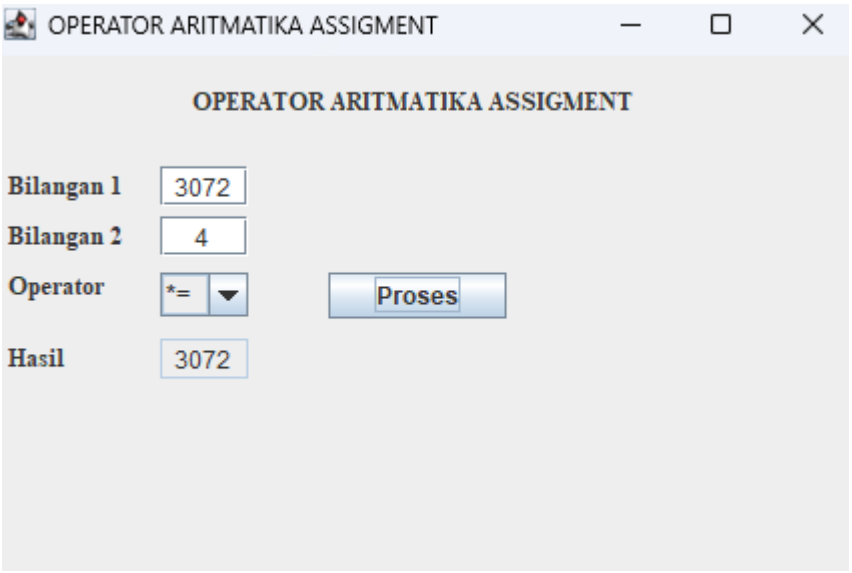
Penjelasan:

Ini program operator aritmatika assignment penjumlahan ketika diinput a dan b dan menekan button proses akan mendapatkan hasil a+b dan kemudian hasil tersebut akan di treansformasikan menjadi a



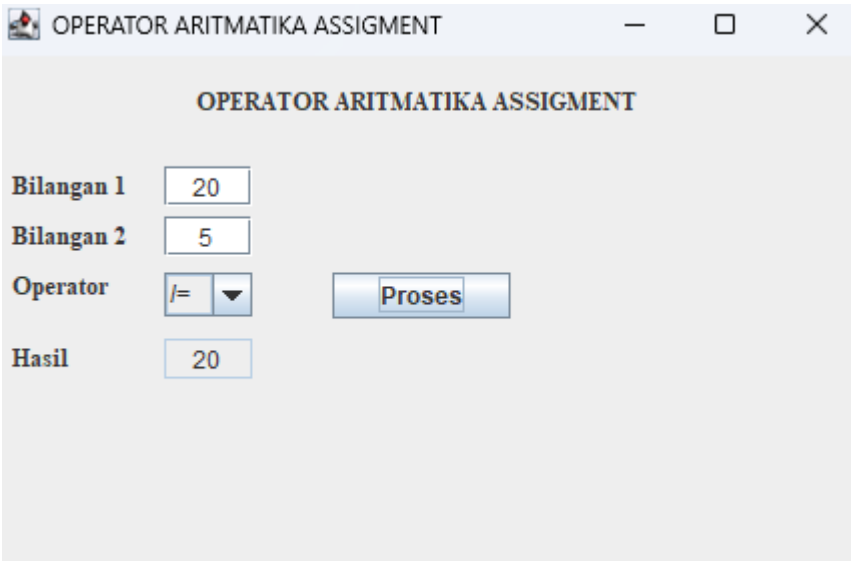
Penjelasan:

Ini program operator aritmatika assignment pengurangan ketika diinput a dan b dan menekan button proses akan mendapatkan hasil a-b dan kemudian hasil tersebut akan di treansformasikan menjadi a



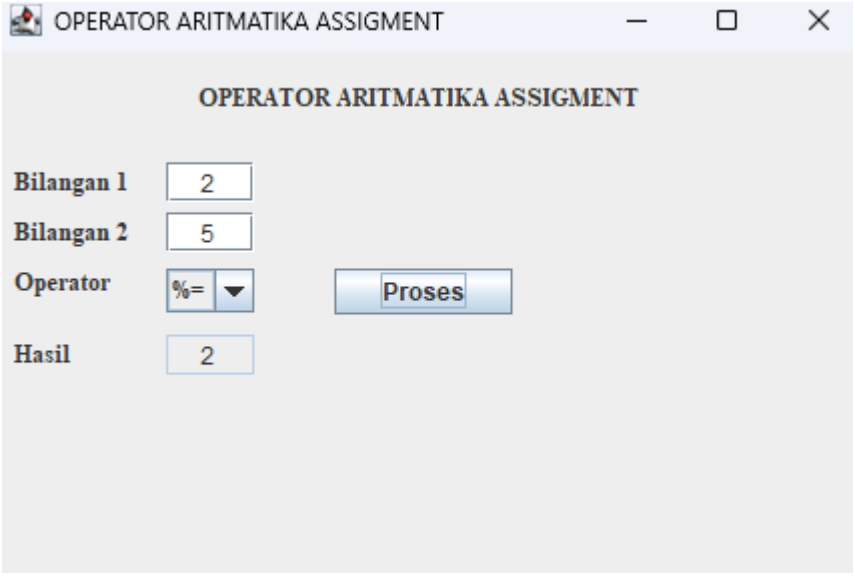
Penjelasan:

Ini program operator aritmatika assignment perkalian ketika diinput a dan b dan menekan button proses akan mendapatkan hasil a*b dan kemudian hasil tersebut akan di treansformasikan menjadi a



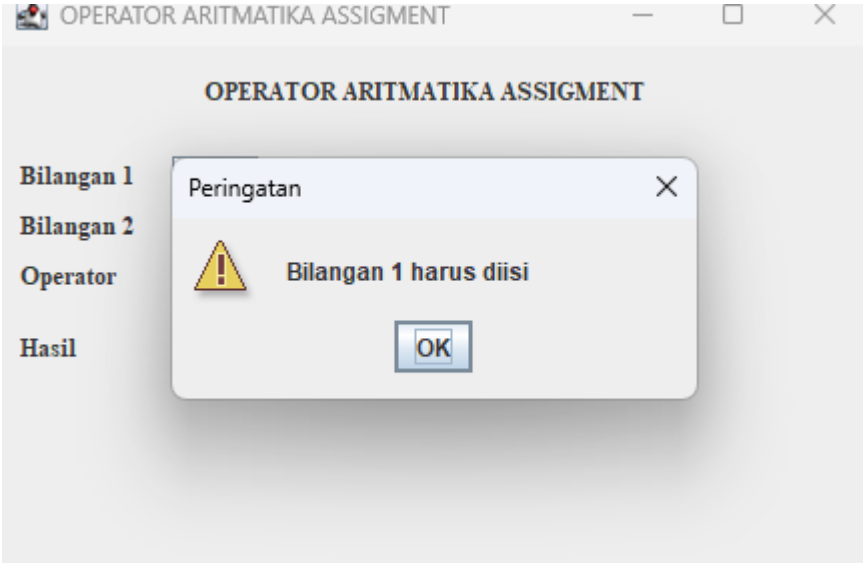
Penjelasan:

Ini program operator aritmatika assignment pembagian ketika diinput a dan b dan menekan button proses akan mendapatkan hasil a/b dan kemudian hasil tersebut akan di treansformasikan menjadi a



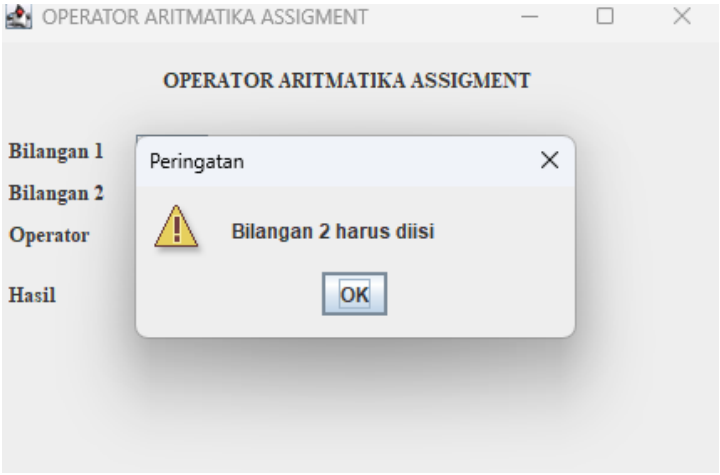
Penjelasan

Ini program operator aritmatika assignment sisa hasil bagi ketika diinput a dan b dan menekan button proses akan mendapatkan hasil a%b dan kemudian hasil tersebut akan di treansformasikan menjadi a



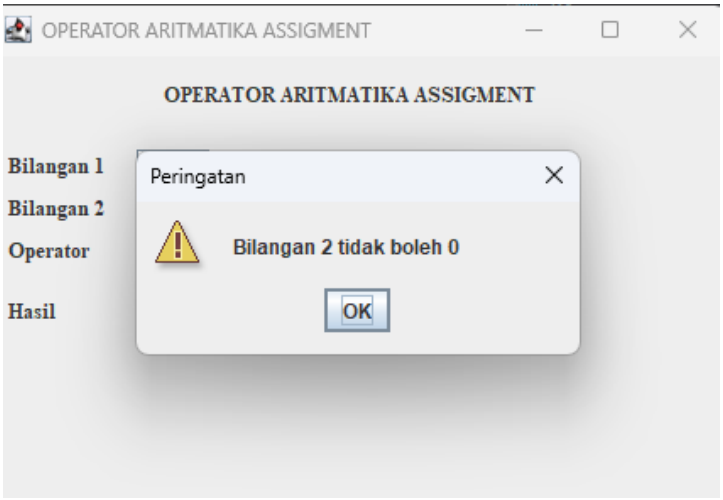
Penjelasan:

Kondisi ketika Bilangan 1 kosong atau tidak diinput



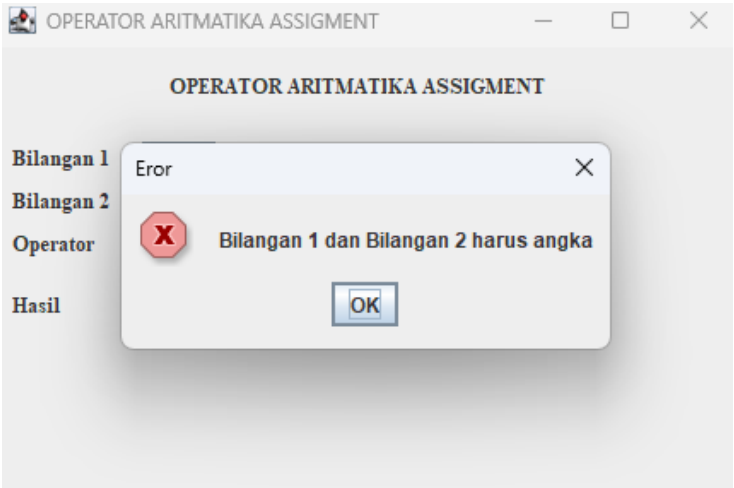
Penjelasan:

Kondisi ketika Bilangan 2 kosong atau tidak diinput



Penjelasan:

Kondisi ketika Bilangan 2 diinput 0



Penjelasan:

Kondisi ketika Bilangan yang di input tidak berupa angka