GRAPHICAL USER INTERFACE

1. Screenshoot hasil Program :
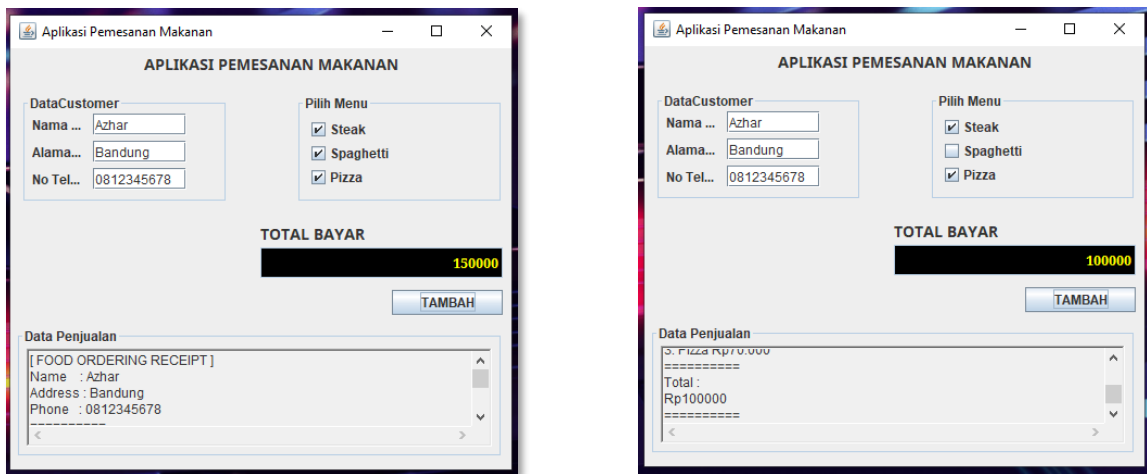
2. Source Code – MainDriver.java

-   Import Library Java Swing – Framework GUI pada Java

```java
import java.awt.BorderLayout;
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JLabel;
import java.awt.Font;
import javax.swing.SwingConstants;
import java.awt.FlowLayout;
import javax.swing.border.TitledBorder;
import java.awt.Panel;
import java.awt.GridBagLayout;
import javax.swing.JTextField;
import javax.swing.JCheckBox;
```

```java
import java.awt.Color;
import javax.swing.JButton;
import javax.swing.JScrollBar;
import java.awt.TextArea;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.JTextArea;
```

- Class Utama dan extends ke JFrame

```java
public class MainDriver extends JFrame
```

- Deklarasi Variabel beserta dengan hak aksesnya

```java
private JPanel contentPane;
private JTextField textField_nama;
private JTextField textField_alamat;
private JTextField textField_notelp;
private JTextField textField_totalBayar;
private JLabel lbl_totalbayar;
private JCheckBox chckbx_pizza;
private JCheckBox chckbx_spaghetti;
private JCheckBox chckbx_steak;
private TextArea textArea_dataPenjualan;
private String disp_receipt = "";
```

- Operasi Menjumlahkan Total Bayar

```java
private void getTotalBayar(){
  int totalBayar = 0;
  if(chckbx_steak.isSelected())
    totalBayar += 30000;
```

```java
    if(chckbx_spaghetti.isSelected())
      totalBayar += 50000;
    if(chckbx_pizza.isSelected())
      totalBayar += 70000;

    textField_totalBayar.setText(String.valueOf(totalBayar));
  }
```

- Operasi Menampilkan Receipt Ordered Food

```java
private void setReceipt(){
  disp_receipt += ("[ FOOD ORDERING RECEIPT ]\n");
  disp_receipt += ("Name    : " + textField_nama.getText() +"\n");
  disp_receipt += ("Address : " + textField_alamat.getText() + "\n");
  disp_receipt += ("Phone   : " + textField_notelp.getText() + "\n");
  disp_receipt += ("=========\n");
  disp_receipt += ("Ordered Food :\n");
  if(chckbx_steak.isSelected())
    disp_receipt += ("1. " + chckbx_steak.getText() + " Rp30.000\n") ;
  if(chckbx_spaghetti.isSelected())
    disp_receipt += ("2. " + chckbx_spaghetti.getText() + " Rp50.000\n");
  if(chckbx_pizza.isSelected())
    disp_receipt += ("3. " + chckbx_pizza.getText() + " Rp70.000\n");
  disp_receipt += ("=========\n");
  disp_receipt += ("Total :\n");
  disp_receipt += ("Rp" + textField_totalBayar.getText() + "\n");
  disp_receipt += ("=========\n");
  textArea_dataPenjualan.setText(disp_receipt);
}
```

- Modul MainDriver (Prosedur)

```java
public MainDriver() {
  setTitle("Aplikasi Pemesanan Makanan\r\n");
  setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
  setBounds(100, 100, 477, 426);
  contentPane = new JPanel();
  contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
  setContentPane(contentPane);
  contentPane.setLayout(null);

  JLabel lbl_judul = new JLabel("APLIKASI PEMESANAN MAKANAN");
  lbl_judul.setBounds(5, 5, 471, 20);
  lbl_judul.setHorizontalAlignment(SwingConstants.CENTER);
  lbl_judul.setFont(new Font("Noto Sans", Font.BOLD, 14));
  contentPane.add(lbl_judul);

  JPanel panel_datacustomer = new JPanel();
  panel_datacustomer.setBounds(10, 42, 190, 100);
  panel_datacustomer.setBorder(new TitledBorder(null, "DataCustomer", TitledB
order.LEADING, TitledBorder.TOP, null, null));
  contentPane.add(panel_datacustomer);
  panel_datacustomer.setLayout(null);

  JLabel lbl_nama = new JLabel("Nama     :");
  lbl_nama.setBounds(10, 21, 46, 14);
  panel_datacustomer.add(lbl_nama);

  JLabel lbl_alamat = new JLabel("Alamat  :");
  lbl_alamat.setBounds(10, 46, 46, 14);
  panel_datacustomer.add(lbl_alamat);

  JLabel lbl_notelp = new JLabel("No Telp :");
  lbl_notelp.setBounds(10, 71, 46, 14);
  panel_datacustomer.add(lbl_notelp);

  textField_nama = new JTextField();
  textField_nama.setBounds(66, 18, 86, 20);
  panel_datacustomer.add(textField_nama);
```

```java
    textField_nama.setColumns(10);

    textField_alamat = new JTextField();
    textField_alamat.setColumns(10);
    textField_alamat.setBounds(66, 43, 86, 20);
    panel_datacustomer.add(textField_alamat);

    textField_notelp = new JTextField();
    textField_notelp.setColumns(10);
    textField_notelp.setBounds(66, 68, 86, 20);
    panel_datacustomer.add(textField_notelp);

    JPanel panel_pilihmenu = new JPanel();
    panel_pilihmenu.setBorder(new TitledBorder(null, "Pilih Menu", TitledBorder
.LEADING, TitledBorder.TOP, null, null));
    panel_pilihmenu.setBounds(263, 42, 190, 100);
    contentPane.add(panel_pilihmenu);
    panel_pilihmenu.setLayout(null);

    chckbx_steak = new JCheckBox("Steak");
    chckbx_steak.setBounds(10, 21, 97, 23);
    panel_pilihmenu.add(chckbx_steak);
    chckbx_steak.addActionListener(new ActionListener() {
      public void actionPerformed(ActionEvent e){
        getTotalBayar();
      }
    });

    chckbx_spaghetti = new JCheckBox("Spaghetti");
    chckbx_spaghetti.setBounds(10, 43, 97, 23);
    panel_pilihmenu.add(chckbx_spaghetti);
    chckbx_spaghetti.addActionListener(new ActionListener() {
      public void actionPerformed(ActionEvent e){
        getTotalBayar();
      }
    });

    chckbx_pizza = new JCheckBox("Pizza");
    chckbx_pizza.setBounds(10, 65, 97, 23);
    panel_pilihmenu.add(chckbx_pizza);
```

```java
chckbx_pizza.addActionListener(new ActionListener() {
  public void actionPerformed(ActionEvent e){
    getTotalBayar();
  }
});

lbl_totalbayar = new JLabel("TOTAL BAYAR");
lbl_totalbayar.setFont(new Font("Noto Sans", Font.BOLD, 14));
lbl_totalbayar.setBounds(230, 164, 102, 14);
contentPane.add(lbl_totalbayar);

textField_totalBayar = new JTextField();
textField_totalBayar.setEditable(false);
textField_totalBayar.setHorizontalAlignment(SwingConstants.RIGHT);
textField_totalBayar.setFont(new Font("Noto Serif", Font.BOLD, 13));
textField_totalBayar.setBackground(Color.BLACK);
textField_totalBayar.setForeground(Color.YELLOW);
textField_totalBayar.setText("0");
textField_totalBayar.setBounds(230, 183, 223, 28);
contentPane.add(textField_totalBayar);
textField_totalBayar.setColumns(10);

JButton btnTambah = new JButton("TAMBAH");
btnTambah.setBounds(351, 222, 102, 23);
contentPane.add(btnTambah);
btnTambah.addActionListener(new ActionListener() {
  public void actionPerformed(ActionEvent e){
    setReceipt();
  }
});

JPanel panelDataPenjualan = new JPanel();
panelDataPenjualan.setLayout(null);
panelDataPenjualan.setBorder(new TitledBorder(null, "Data Penjualan", TitledBorder.LEADING, TitledBorder.TOP, null, null));
panelDataPenjualan.setBounds(5, 256, 448, 120);
contentPane.add(panelDataPenjualan);

textArea_dataPenjualan = new TextArea();
textArea_dataPenjualan.setEditable(false);
```

```java
    textArea_dataPenjualan.setBounds(10, 20, 428, 90);
    panelDataPenjualan.add(textArea_dataPenjualan);
}
```

- Main Program – Food Ordering App

```java
public static void main(String[] args) {
  EventQueue.invokeLater(new Runnable() {
    public void run() {
      try {
        MainDriver frame = new MainDriver();
        frame.setVisible(true);
      } catch (Exception e) {
        e.printStackTrace();
      }
    }
  });
}
```