evasik\_pivasik:  
using Npgsql;  
using System.Data;  
using System.Windows.Forms;  
using System.Xml.Linq;  
using static System.Windows.Forms.VisualStyles.VisualStyleElement;  
  
namespace подготовка\_к\_дэ  
{  
    public partial class Form1 : Form  
    {  
        string connectionString = "Host=localhost;Username=postgres;Database=masterpol";  
  
        public Form1()  
        {  
            InitializeComponent();  
            LoadPartners();  
            // Шрифт  
            this.Font = new Font("Segoe UI", 9F);  
  
            // Основной фон  
            this.BackColor = Color.White; // #FFFFFF  
  
            // Пример: панель с дополнительным фоном  
            panel1.BackColor = ColorTranslator.FromHtml("#F4E8D3");  
  
            // Кнопка с акцентом  
            btnAdd.BackColor = ColorTranslator.FromHtml("#67BA80");  
            btnAdd.ForeColor = Color.White; // текст на кнопке  
        }  
  
        private void LoadPartners()  
        {  
            using (var conn = new NpgsqlConnection(connectionString))  
            {  
                conn.Open();  
                var cmd = new NpgsqlCommand("SELECT \* FROM partners", conn);  
                var adapter = new NpgsqlDataAdapter(cmd);  
                var table = new DataTable();  
                adapter.Fill(table);  
                dataGridView1.DataSource = table;  
            }  
        }  
  
        private void btnAdd\_Click(object sender, EventArgs e)  
        {  
            using (var conn = new NpgsqlConnection(connectionString))  
            {  
                conn.Open();  
                var cmd = new NpgsqlCommand("INSERT INTO partners (type, name, director, email, phone, address, inn, rating) VALUES (@type, @name, @dir, @mail, @phone, @addr, @inn, @rating)", conn);  
                cmd.Parameters.AddWithValue("type", txtType.Text);  
                cmd.Parameters.AddWithValue("name", txtName.Text);  
                cmd.Parameters.AddWithValue("dir", txtDirector.Text);  
                cmd.Parameters.AddWithValue("mail", txtEmail.Text);  
                cmd.Parameters.AddWithValue("phone", txtPhone.Text);  
                cmd.Parameters.AddWithValue("addr", txtAddress.Text);  
                cmd.Parameters.AddWithValue("inn", txtINN.Text);  
                cmd.Parameters.AddWithValue("rating", int.Parse(txtRating.Text));  
                cmd.ExecuteNonQuery();  
                LoadPartners();  
            }  
        }  
  
        private void btnOpenProducts\_Click(object sender, EventArgs e)  
        {  
            var form = new ProductsForm();  
            form.ShowDialog();  
        }  
  
        private void btnOpenOrders\_Click(object sender, EventArgs e)  
        {  
            var form = new OrderForm();  
            form.ShowDialog();  
        }  
    }  
}  
  
using Npgsql;  
using System;  
using System.Collections.Generic;  
using System.ComponentModel;  
using System.Data;  
using System.Drawing;  
using System.Linq;  
using System.Text;  
using System.Threading.Tasks;  
using System.Windows.Forms;  
  
namespace подготовка\_к\_дэ  
{  
    public partial class OrderForm : Form  
    {  
        string connectionString = "Host=localhost;Username=postgres;Database=masterpol";  
        public OrderForm()  
        {  
            InitializeComponent();  
            Load += OrderForm\_Load;  
        }  
        private void OrderForm\_Load(object sender, EventArgs e)  
        {  
            LoadOrders();  
            using (var conn = new NpgsqlConnection(connectionString))  
            {  
                conn.Open();  
  
                // Загрузка партнёров  
                using (var cmd = new NpgsqlCommand("SELECT id, name FROM partners", conn))  
                using (var reader = cmd.ExecuteReader())  
                {  
                    var partnerList = new List<KeyValuePair<int, string>>();  
                    while (reader.Read())  
                        partnerList.Add(new KeyValuePair<int, string>(reader.GetInt32(0), reader.GetString(1)));  
  
                    cmbPartner.DataSource = new BindingSource(partnerList, null);  
                    cmbPartner.DisplayMember = "Value";  
                    cmbPartner.ValueMember = "Key";  
                }  
  
                readerCloseOpen(conn);  
  
                // Загрузка продуктов  
                using (var cmd = new NpgsqlCommand("SELECT id, name FROM products", conn))  
                using (var reader = cmd.ExecuteReader())  
                {  
                    var productList = new List<KeyValuePair<int, string>>();  
                    while (reader.Read())  
                        productList.Add(new KeyValuePair<int, string>(reader.GetInt32(0), reader.GetString(1)));  
  
                    cmbProduct.DataSource = new BindingSource(productList, null);  
                    cmbProduct.DisplayMember = "Value";  
                    cmbProduct.ValueMember = "Key";  
                }  
  
  
            }  
        }  
  
        private void LoadOrders()  
        {  
            using (var conn = new NpgsqlConnection(connectionString))  
            {  
                conn.Open();  
                var query = @"  
            SELECT   
                pp.id,  
                p.name AS partner\_name,  
                pr.name AS product\_name,  
                pp.quantity,  
                pp.sale\_date  
            FROM   
                partners\_products pp  
            JOIN   
                partners p ON pp.partner\_id = p.id  
            JOIN   
                products pr ON pp.product\_id = pr.id";  
  
                using (var cmd = new NpgsqlCommand(query, conn))  
                using (var adapter = new NpgsqlDataAdapter(cmd))  
                {  
                    var table = new DataTable();  
                    adapter.Fill(table);  
                    dataGridView1.DataSource = table;  
                }  
            }  
        }  
  
        private void readerCloseOpen(NpgsqlConnection conn)  
        {  
            // Вспомогательная функция для закрытия и открытия соединения (между SELECT-ами)  
            conn.Close();  
            conn.Open();  
        }  
  
        private void btnSave\_Click(object sender, EventArgs e)  
        {  
            if (!int.TryParse(txtQuantity.Text, out int quantity))  
            {  
                MessageBox.Show("Введите корректное количество.");  
                return;  
            }  
  
            int partnerId = ((KeyValuePair<int, string>)cmbPartner.SelectedItem).Key;  
            int productId = ((KeyValuePair<int, string>)cmbProduct.SelectedItem).Key;  
            DateTime saleDate = dtpSaleDate.Value;  
  
using (var conn = new NpgsqlConnection(connectionString))  
            {  
                conn.Open();  
                var cmd = new NpgsqlCommand(@"INSERT INTO partners\_products   
                    (partner\_id, product\_id, quantity, sale\_date)   
                    VALUES (@partner, @product, @qty, @date)", conn);  
                cmd.Parameters.AddWithValue("partner", partnerId);  
                cmd.Parameters.AddWithValue("product", productId);  
                cmd.Parameters.AddWithValue("qty", quantity);  
                cmd.Parameters.AddWithValue("date", saleDate);  
                cmd.ExecuteNonQuery();  
  
                MessageBox.Show("Заказ успешно добавлен.");  
                LoadOrders();  
            }  
        }  
    }  
}