Trần Thanh Phương BT5

Bài làm :

Bài 1:



Code form 1.cs

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 TranThanhPhuong\_1150080165

{

public class Form1 : Form

{

private Label lblTitle;

private Label lblA;

private Label lblB;

private Label lblKetQua;

private TextBox txtA;

private TextBox txtB;

private TextBox txtKetQua;

private Button btnCong;

private Button btnTru;

private Button btnNhan;

private Button btnChia;

private Button btnXoa;

private Button btnThoat;

public Form1()

{

InitializeComponent();

}

private void InitializeComponent()

{

lblTitle = new Label();

lblA = new Label();

lblB = new Label();

lblKetQua = new Label();

txtA = new TextBox();

txtB = new TextBox();

txtKetQua = new TextBox();

btnCong = new Button();

btnTru = new Button();

btnNhan = new Button();

btnChia = new Button();

btnXoa = new Button();

btnThoat = new Button();

SuspendLayout();

//

// lblTitle

//

lblTitle.AutoSize = true;

lblTitle.Font = new Font("Arial", 14F, FontStyle.Bold);

lblTitle.ForeColor = Color.FromArgb(51, 51, 51);

lblTitle.Location = new Point(70, 25);

lblTitle.Name = "lblTitle";

lblTitle.Size = new Size(694, 45);

lblTitle.TabIndex = 0;

lblTitle.Text = "THỰC HIỆN CÁC PHÉP TÍNH SỐ HỌC";

//

// lblA

//

lblA.AutoSize = true;

lblA.Font = new Font("Arial", 10F);

lblA.ForeColor = Color.FromArgb(51, 51, 51);

lblA.Location = new Point(115, 88);

lblA.Name = "lblA";

lblA.Size = new Size(146, 32);

lblA.TabIndex = 1;

lblA.Text = "Nhập số a:";

//

// lblB

//

lblB.AutoSize = true;

lblB.Font = new Font("Arial", 10F);

lblB.ForeColor = Color.FromArgb(51, 51, 51);

lblB.Location = new Point(115, 136);

lblB.Name = "lblB";

lblB.Size = new Size(146, 32);

lblB.TabIndex = 3;

lblB.Text = "Nhập số b:";

//

// lblKetQua

//

lblKetQua.AutoSize = true;

lblKetQua.Font = new Font("Arial", 10F);

lblKetQua.ForeColor = Color.FromArgb(51, 51, 51);

lblKetQua.Location = new Point(115, 295);

lblKetQua.Name = "lblKetQua";

lblKetQua.Size = new Size(116, 32);

lblKetQua.TabIndex = 9;

lblKetQua.Text = "Kết quả:";

//

// txtA

//

txtA.BorderStyle = BorderStyle.FixedSingle;

txtA.Font = new Font("Arial", 10F);

txtA.Location = new Point(290, 90);

txtA.Name = "txtA";

txtA.Size = new Size(250, 38);

txtA.TabIndex = 2;

txtA.TextChanged += txtA\_TextChanged;

//

// txtB

//

txtB.BorderStyle = BorderStyle.FixedSingle;

txtB.Font = new Font("Arial", 10F);

txtB.Location = new Point(290, 136);

txtB.Name = "txtB";

txtB.Size = new Size(250, 38);

txtB.TabIndex = 4;

//

// txtKetQua

//

txtKetQua.BackColor = Color.FromArgb(248, 248, 248);

txtKetQua.BorderStyle = BorderStyle.FixedSingle;

txtKetQua.Font = new Font("Arial", 10F);

txtKetQua.Location = new Point(290, 293);

txtKetQua.Name = "txtKetQua";

txtKetQua.ReadOnly = true;

txtKetQua.Size = new Size(250, 38);

txtKetQua.TabIndex = 10;

//

// btnCong

//

btnCong.BackColor = Color.FromArgb(230, 230, 230);

btnCong.Cursor = Cursors.Hand;

btnCong.FlatStyle = FlatStyle.Popup;

btnCong.Font = new Font("Arial", 10F);

btnCong.Location = new Point(99, 219);

btnCong.Name = "btnCong";

btnCong.Size = new Size(117, 40);

btnCong.TabIndex = 5;

btnCong.Text = "Cộng";

btnCong.UseVisualStyleBackColor = false;

btnCong.Click += btnCong\_Click;

//

// btnTru

//

btnTru.BackColor = Color.FromArgb(230, 230, 230);

btnTru.Cursor = Cursors.Hand;

btnTru.FlatStyle = FlatStyle.Popup;

btnTru.Font = new Font("Arial", 10F);

btnTru.Location = new Point(290, 219);

btnTru.Name = "btnTru";

btnTru.Size = new Size(114, 40);

btnTru.TabIndex = 6;

btnTru.Text = "Trừ";

btnTru.UseVisualStyleBackColor = false;

btnTru.Click += btnTru\_Click;

//

// btnNhan

//

btnNhan.BackColor = Color.FromArgb(230, 230, 230);

btnNhan.Cursor = Cursors.Hand;

btnNhan.FlatStyle = FlatStyle.Popup;

btnNhan.Font = new Font("Arial", 10F);

btnNhan.Location = new Point(494, 219);

btnNhan.Name = "btnNhan";

btnNhan.Size = new Size(106, 40);

btnNhan.TabIndex = 7;

btnNhan.Text = "Nhân";

btnNhan.UseVisualStyleBackColor = false;

btnNhan.Click += btnNhan\_Click;

//

// btnChia

//

btnChia.BackColor = Color.FromArgb(230, 230, 230);

btnChia.Cursor = Cursors.Hand;

btnChia.FlatStyle = FlatStyle.Popup;

btnChia.Font = new Font("Arial", 10F);

btnChia.Location = new Point(666, 219);

btnChia.Name = "btnChia";

btnChia.Size = new Size(101, 40);

btnChia.TabIndex = 8;

btnChia.Text = "Chia";

btnChia.UseVisualStyleBackColor = false;

btnChia.Click += btnChia\_Click;

//

// btnXoa

//

btnXoa.BackColor = Color.FromArgb(255, 193, 7);

btnXoa.Cursor = Cursors.Hand;

btnXoa.FlatStyle = FlatStyle.Popup;

btnXoa.Font = new Font("Arial", 10F);

btnXoa.ForeColor = Color.White;

btnXoa.Location = new Point(290, 386);

btnXoa.Name = "btnXoa";

btnXoa.Size = new Size(114, 41);

btnXoa.TabIndex = 11;

btnXoa.Text = "Xóa";

btnXoa.UseVisualStyleBackColor = false;

btnXoa.Click += btnXoa\_Click;

//

// btnThoat

//

btnThoat.BackColor = Color.FromArgb(220, 53, 69);

btnThoat.Cursor = Cursors.Hand;

btnThoat.FlatStyle = FlatStyle.Popup;

btnThoat.Font = new Font("Arial", 10F);

btnThoat.ForeColor = Color.White;

btnThoat.Location = new Point(460, 386);

btnThoat.Name = "btnThoat";

btnThoat.Size = new Size(123, 41);

btnThoat.TabIndex = 12;

btnThoat.Text = "Thoát";

btnThoat.UseVisualStyleBackColor = false;

btnThoat.Click += btnThoat\_Click;

//

// Form1

//

BackColor = Color.FromArgb(240, 240, 240);

ClientSize = new Size(808, 540);

Controls.Add(lblTitle);

Controls.Add(lblA);

Controls.Add(txtA);

Controls.Add(lblB);

Controls.Add(txtB);

Controls.Add(btnCong);

Controls.Add(btnTru);

Controls.Add(btnNhan);

Controls.Add(btnChia);

Controls.Add(lblKetQua);

Controls.Add(txtKetQua);

Controls.Add(btnXoa);

Controls.Add(btnThoat);

FormBorderStyle = FormBorderStyle.FixedSingle;

MaximizeBox = false;

Name = "Form1";

StartPosition = FormStartPosition.CenterScreen;

Text = "Thực hành 1";

ResumeLayout(false);

PerformLayout();

}

// Hàm kiểm tra và lấy số từ textbox

private bool LayGiaTri(out double a, out double b)

{

bool hopLe1 = double.TryParse(txtA.Text.Trim(), out a);

bool hopLe2 = double.TryParse(txtB.Text.Trim(), out b);

if (!hopLe1 || !hopLe2)

{

MessageBox.Show("Vui lòng nhập số hợp lệ!", "Lỗi nhập liệu",

MessageBoxButtons.OK, MessageBoxIcon.Warning);

return false;

}

return true;

}

// Event handler cho button Cộng

private void btnCong\_Click(object sender, EventArgs e)

{

if (LayGiaTri(out double a, out double b))

{

double ketQua = a + b;

txtKetQua.Text = ketQua.ToString("0.####");

}

}

// Event handler cho button Trừ

private void btnTru\_Click(object sender, EventArgs e)

{

if (LayGiaTri(out double a, out double b))

{

double ketQua = a - b;

txtKetQua.Text = ketQua.ToString("0.####");

}

}

// Event handler cho button Nhân

private void btnNhan\_Click(object sender, EventArgs e)

{

if (LayGiaTri(out double a, out double b))

{

double ketQua = a \* b;

txtKetQua.Text = ketQua.ToString("0.####");

}

}

// Event handler cho button Chia

private void btnChia\_Click(object sender, EventArgs e)

{

if (LayGiaTri(out double a, out double b))

{

if (b == 0)

{

MessageBox.Show("Không thể chia cho 0!", "Lỗi toán học",

MessageBoxButtons.OK, MessageBoxIcon.Error);

return;

}

double ketQua = a / b;

txtKetQua.Text = ketQua.ToString("0.####");

}

}

// Event handler cho button Xóa

private void btnXoa\_Click(object sender, EventArgs e)

{

txtA.Clear();

txtB.Clear();

txtKetQua.Clear();

txtA.Focus(); // Đặt con trở về ô nhập đầu tiên

}

// Event handler cho button Thoát

private void btnThoat\_Click(object sender, EventArgs e)

{

DialogResult result = MessageBox.Show("Bạn có chắc chắn muốn thoát?", "Xác nhận",

MessageBoxButtons.YesNo, MessageBoxIcon.Question);

if (result == DialogResult.Yes)

{

Application.Exit();

}

}

private void Form1\_Load(object sender, EventArgs e)

{

// Đặt focus vào textbox đầu tiên khi form load

txtA.Focus();

}

private void txtA\_TextChanged(object sender, EventArgs e)

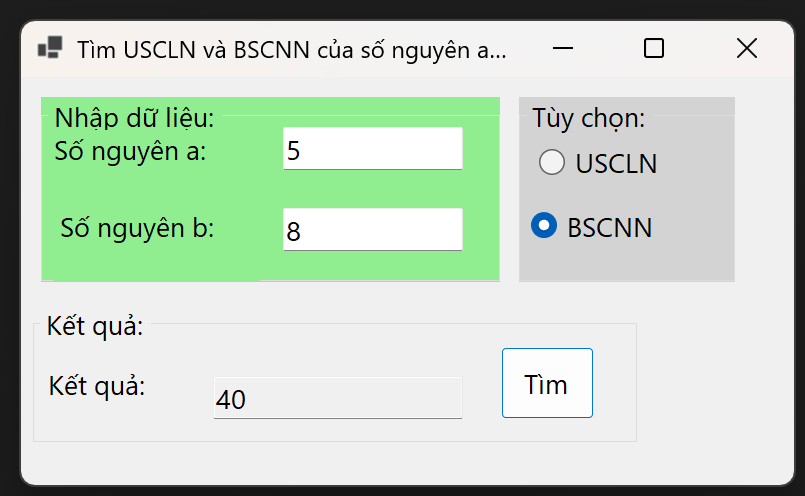
{

}

}

}

Bài 2 :



Code form.cs

using System;

using System.Drawing;

using System.Windows.Forms;

namespace TranThanhPhuong\_1150080165

{

public class Form2 : Form

{

private GroupBox grpNhap, grpChon, grpKetQua;

private Label lblA, lblB, lblKetQua;

private TextBox txtA, txtB, txtKetQua;

private RadioButton rdoUSCLN, rdoBSCNN;

private Button btnTim, btnThoat;

public Form2()

{

InitializeComponent();

}

private void InitializeComponent()

{

grpNhap = new GroupBox();

lblA = new Label();

txtA = new TextBox();

lblB = new Label();

txtB = new TextBox();

grpChon = new GroupBox();

rdoUSCLN = new RadioButton();

rdoBSCNN = new RadioButton();

grpKetQua = new GroupBox();

lblKetQua = new Label();

txtKetQua = new TextBox();

btnTim = new Button();

btnThoat = new Button();

grpNhap.SuspendLayout();

grpChon.SuspendLayout();

grpKetQua.SuspendLayout();

SuspendLayout();

grpNhap.BackColor = Color.LightGreen;

grpNhap.Controls.Add(lblA);

grpNhap.Controls.Add(txtA);

grpNhap.Controls.Add(lblB);

grpNhap.Controls.Add(txtB);

grpNhap.Location = new Point(20, 20);

grpNhap.Name = "grpNhap";

grpNhap.Size = new Size(459, 185);

grpNhap.TabIndex = 0;

grpNhap.TabStop = false;

grpNhap.Text = "Nhập dữ liệu:";

lblA.Location = new Point(6, 33);

lblA.Name = "lblA";

lblA.Size = new Size(213, 80);

lblA.TabIndex = 0;

lblA.Text = "Số nguyên a:";

txtA.Location = new Point(242, 30);

txtA.Name = "txtA";

txtA.Size = new Size(180, 43);

txtA.TabIndex = 1;

lblB.Location = new Point(12, 110);

lblB.Name = "lblB";

lblB.Size = new Size(207, 75);

lblB.TabIndex = 2;

lblB.Text = "Số nguyên b:";

txtB.Location = new Point(242, 111);

txtB.Name = "txtB";

txtB.Size = new Size(180, 43);

txtB.TabIndex = 3;

grpChon.BackColor = Color.LightGray;

grpChon.Controls.Add(rdoUSCLN);

grpChon.Controls.Add(rdoBSCNN);

grpChon.Location = new Point(498, 20);

grpChon.Name = "grpChon";

grpChon.Size = new Size(216, 185);

grpChon.TabIndex = 1;

grpChon.TabStop = false;

grpChon.Text = "Tùy chọn:";

//

// rdoUSCLN

//

rdoUSCLN.Location = new Point(20, 42);

rdoUSCLN.Name = "rdoUSCLN";

rdoUSCLN.Size = new Size(165, 46);

rdoUSCLN.TabIndex = 0;

rdoUSCLN.Text = "USCLN";

//

// rdoBSCNN

//

rdoBSCNN.Location = new Point(12, 103);

rdoBSCNN.Name = "rdoBSCNN";

rdoBSCNN.Size = new Size(159, 51);

rdoBSCNN.TabIndex = 1;

rdoBSCNN.Text = "BSCNN";

//

// grpKetQua

//

grpKetQua.Controls.Add(lblKetQua);

grpKetQua.Controls.Add(txtKetQua);

grpKetQua.Controls.Add(btnTim);

grpKetQua.Location = new Point(12, 228);

grpKetQua.Name = "grpKetQua";

grpKetQua.Size = new Size(604, 138);

grpKetQua.TabIndex = 2;

grpKetQua.TabStop = false;

grpKetQua.Text = "Kết quả:";

//

// lblKetQua

//

lblKetQua.Location = new Point(8, 60);

lblKetQua.Name = "lblKetQua";

lblKetQua.Size = new Size(154, 57);

lblKetQua.TabIndex = 0;

lblKetQua.Text = "Kết quả:";

lblKetQua.Click += lblKetQua\_Click;

//

// txtKetQua

//

txtKetQua.Location = new Point(180, 71);

txtKetQua.Name = "txtKetQua";

txtKetQua.ReadOnly = true;

txtKetQua.Size = new Size(250, 43);

txtKetQua.TabIndex = 1;

txtKetQua.TextChanged += txtKetQua\_TextChanged;

//

// btnTim

//

btnTim.Location = new Point(468, 42);

btnTim.Name = "btnTim";

btnTim.Size = new Size(93, 72);

btnTim.TabIndex = 2;

btnTim.Text = "Tìm";

btnTim.Click += BtnTim\_Click;

//

// btnThoat

//

btnThoat.Location = new Point(480, 240);

btnThoat.Name = "btnThoat";

btnThoat.Size = new Size(75, 23);

btnThoat.TabIndex = 3;

btnThoat.Text = "Thoát";

btnThoat.Click += BtnThoat\_Click;

//

// Form1

//

ClientSize = new Size(773, 408);

Controls.Add(grpNhap);

Controls.Add(grpChon);

Controls.Add(grpKetQua);

Controls.Add(btnThoat);

Font = new Font("Segoe UI", 10F);

Name = "Form1";

StartPosition = FormStartPosition.CenterScreen;

Text = "Tìm USCLN và BSCNN của số nguyên a và b";

grpNhap.ResumeLayout(false);

grpNhap.PerformLayout();

grpChon.ResumeLayout(false);

grpKetQua.ResumeLayout(false);

grpKetQua.PerformLayout();

ResumeLayout(false);

}

// Hàm tính USCLN

private int USCLN(int a, int b)

{

a = Math.Abs(a);

b = Math.Abs(b);

while (b != 0)

{

int r = a % b;

a = b;

b = r;

}

return a;

}

// Hàm tính BSCNN

private int BSCNN(int a, int b)

{

return Math.Abs(a \* b) / USCLN(a, b);

}

private void BtnTim\_Click(object sender, EventArgs e)

{

if (!int.TryParse(txtA.Text.Trim(), out int a) ||

!int.TryParse(txtB.Text.Trim(), out int b))

{

MessageBox.Show("Vui lòng nhập số nguyên hợp lệ!", "Lỗi",

MessageBoxButtons.OK, MessageBoxIcon.Warning);

return;

}

if (rdoUSCLN.Checked)

{

txtKetQua.Text = USCLN(a, b).ToString();

}

else if (rdoBSCNN.Checked)

{

txtKetQua.Text = BSCNN(a, b).ToString();

}

else

{

MessageBox.Show("Vui lòng chọn USCLN hoặc BSCNN!", "Thông báo",

MessageBoxButtons.OK, MessageBoxIcon.Information);

}

}

private void BtnThoat\_Click(object sender, EventArgs e)

{

if (MessageBox.Show("Bạn có chắc muốn thoát?", "Xác nhận",

MessageBoxButtons.YesNo, MessageBoxIcon.Question) == DialogResult.Yes)

{

Application.Exit();

}

}

private void txtKetQua\_TextChanged(object sender, EventArgs e)

{

}

private void grpKetQua\_Enter(object sender, EventArgs e)

{

}

private void lblKetQua\_Click(object sender, EventArgs e)

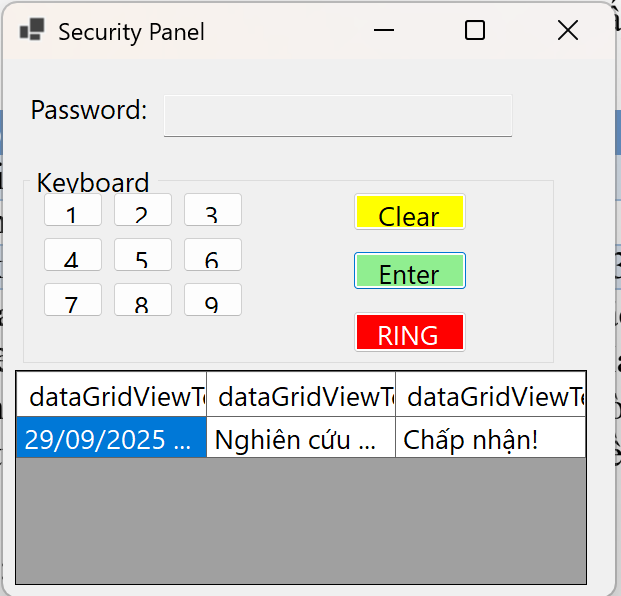
{

}

}

}

Bài 3:



Code form.cs

using System;

using System.Collections.Generic;

using System.Drawing;

using System.Windows.Forms;

using static System.Windows.Forms.VisualStyles.VisualStyleElement.Window;

namespace TranThanhPhuong\_1150080165

{

public partial class Form3 : Form

{

// Map password và nhóm

private Dictionary<string, string> passwordMap = new Dictionary<string, string>()

{

{"1496", "Phát triển công nghệ"},

{"2673", "Phát triển công nghệ"},

{"7462", "Nghiên cứu viên"},

{"8884", "Thiết kế mô hình"},

{"3842", "Thiết kế mô hình"},

{"3383", "Thiết kế mô hình"}

};

public Form3()

{

InitializeComponent();

InitKeyPad(); // thêm các nút số vào groupBox Keyboard

}

// Tạo bàn phím số 1–9

private void InitKeyPad()

{

int xStart = 20, yStart = 30;

int w = 60, h = 35, gap = 10;

int num = 1;

for (int row = 0; row < 3; row++)

{

for (int col = 0; col < 3; col++)

{

Button btn = new Button();

btn.Text = num.ToString();

btn.Size = new Size(w, h);

btn.Location = new Point(xStart + col \* (w + gap), yStart + row \* (h + gap));

btn.Click += NumButton\_Click;

grpKeyboard.Controls.Add(btn);

num++;

}

}

}

private void NumButton\_Click(object sender, EventArgs e)

{

if (sender is Button btn)

{

txtPassword.Text += btn.Text;

}

}

private void btnClear\_Click(object sender, EventArgs e)

{

txtPassword.Clear();

}

private void btnEnter\_Click(object sender, EventArgs e)

{

string pwd = txtPassword.Text.Trim();

string group = "Không có";

string result;

if (passwordMap.ContainsKey(pwd))

{

group = passwordMap[pwd];

result = "Chấp nhận!";

}

else

{

result = "Từ chối!";

}

dgvLog.Rows.Add(DateTime.Now.ToString("dd/MM/yyyy HH:mm:ss"), group, result);

txtPassword.Clear();

}

private void btnRing\_Click(object sender, EventArgs e)

{

MessageBox.Show("🔔 Chuông báo động!", "RING", MessageBoxButtons.OK, MessageBoxIcon.Warning);

}

private void grpKeyboard\_Enter(object sender, EventArgs e)

{

}

private void lblPassword\_Click(object sender, EventArgs e)

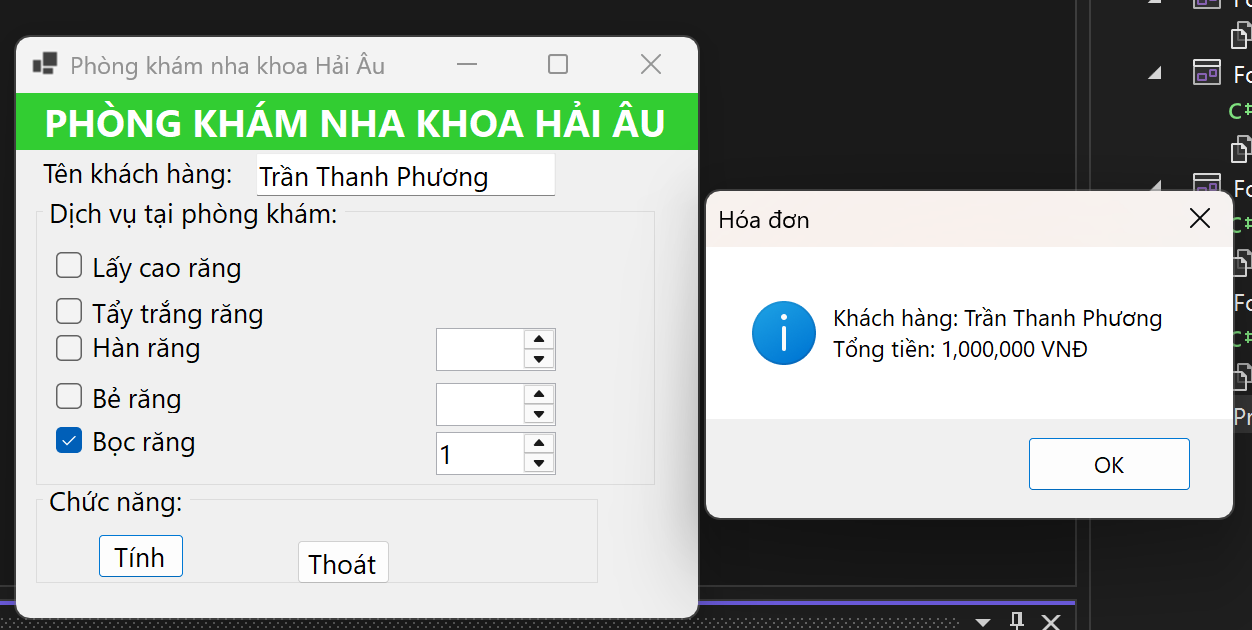
{

}

}

}

Bài 4:



Code designer.cs

using System.Drawing;

using System.Windows.Forms;

namespace TranThanhPhuong\_1150080165

{

partial class Form4

{

private Label lblTenKH;

private TextBox txtTenKH;

private GroupBox grpDichVu;

private CheckBox chkLayCaoRang;

private CheckBox chkTayTrangRang;

private CheckBox chkHanRang;

private CheckBox chkBeRang;

private CheckBox chkBocRang;

private NumericUpDown numHanRang;

private NumericUpDown numBeRang;

private NumericUpDown numBocRang;

private GroupBox grpChucNang;

private Button btnTinhTien;

private Button btnThoat;

private Label lblHeader;

private void InitializeComponent()

{

lblHeader = new Label();

lblTenKH = new Label();

txtTenKH = new TextBox();

grpDichVu = new GroupBox();

chkLayCaoRang = new CheckBox();

chkTayTrangRang = new CheckBox();

chkHanRang = new CheckBox();

numHanRang = new NumericUpDown();

chkBeRang = new CheckBox();

numBeRang = new NumericUpDown();

chkBocRang = new CheckBox();

numBocRang = new NumericUpDown();

grpChucNang = new GroupBox();

btnTinhTien = new Button();

btnThoat = new Button();

grpDichVu.SuspendLayout();

((System.ComponentModel.ISupportInitialize)numHanRang).BeginInit();

((System.ComponentModel.ISupportInitialize)numBeRang).BeginInit();

((System.ComponentModel.ISupportInitialize)numBocRang).BeginInit();

grpChucNang.SuspendLayout();

SuspendLayout();

//

// lblHeader

//

lblHeader.BackColor = Color.LimeGreen;

lblHeader.Dock = DockStyle.Top;

lblHeader.Font = new Font("Segoe UI", 14F, FontStyle.Bold);

lblHeader.ForeColor = Color.White;

lblHeader.Location = new Point(0, 0);

lblHeader.Name = "lblHeader";

lblHeader.Size = new Size(682, 57);

lblHeader.TabIndex = 0;

lblHeader.Text = "PHÒNG KHÁM NHA KHOA HẢI ÂU";

lblHeader.TextAlign = ContentAlignment.MiddleCenter;

//

// lblTenKH

//

lblTenKH.AutoSize = true;

lblTenKH.Location = new Point(20, 60);

lblTenKH.Name = "lblTenKH";

lblTenKH.Size = new Size(206, 37);

lblTenKH.TabIndex = 1;

lblTenKH.Text = "Tên khách hàng:";

//

// txtTenKH

//

txtTenKH.Location = new Point(240, 60);

txtTenKH.Name = "txtTenKH";

txtTenKH.Size = new Size(300, 43);

txtTenKH.TabIndex = 2;

//

// grpDichVu

//

grpDichVu.Controls.Add(chkLayCaoRang);

grpDichVu.Controls.Add(chkTayTrangRang);

grpDichVu.Controls.Add(chkHanRang);

grpDichVu.Controls.Add(numHanRang);

grpDichVu.Controls.Add(chkBeRang);

grpDichVu.Controls.Add(numBeRang);

grpDichVu.Controls.Add(chkBocRang);

grpDichVu.Controls.Add(numBocRang);

grpDichVu.Location = new Point(20, 100);

grpDichVu.Name = "grpDichVu";

grpDichVu.Size = new Size(619, 293);

grpDichVu.TabIndex = 3;

grpDichVu.TabStop = false;

grpDichVu.Text = "Dịch vụ tại phòng khám:";

//

// chkLayCaoRang

//

chkLayCaoRang.Location = new Point(20, 53);

chkLayCaoRang.Name = "chkLayCaoRang";

chkLayCaoRang.Size = new Size(213, 40);

chkLayCaoRang.TabIndex = 0;

chkLayCaoRang.Text = "Lấy cao răng 50.000đ/2 hàm";

chkLayCaoRang.CheckedChanged += chkLayCaoRang\_CheckedChanged;

//

// chkTayTrangRang

//

chkTayTrangRang.Location = new Point(20, 99);

chkTayTrangRang.Name = "chkTayTrangRang";

chkTayTrangRang.Size = new Size(337, 40);

chkTayTrangRang.TabIndex = 1;

chkTayTrangRang.Text = "Tẩy trắng răng 100.000đ/2 hàm";

//

// chkHanRang

//

chkHanRang.Location = new Point(20, 133);

chkHanRang.Name = "chkHanRang";

chkHanRang.Size = new Size(334, 45);

chkHanRang.TabIndex = 2;

chkHanRang.Text = "Hàn răng 100.000đ/1 răng";

//

// numHanRang

//

numHanRang.Location = new Point(400, 135);

numHanRang.Maximum = new decimal(new int[] { 20, 0, 0, 0 });

numHanRang.Minimum = new decimal(new int[] { 1, 0, 0, 0 });

numHanRang.Name = "numHanRang";

numHanRang.Size = new Size(120, 43);

numHanRang.TabIndex = 3;

numHanRang.Value = new decimal(new int[] { 1, 0, 0, 0 });

//

// chkBeRang

//

chkBeRang.Location = new Point(20, 184);

chkBeRang.Name = "chkBeRang";

chkBeRang.Size = new Size(168, 39);

chkBeRang.TabIndex = 4;

chkBeRang.Text = "Bẻ răng 10.000đ/1 răng";

//

// numBeRang

//

numBeRang.Location = new Point(400, 190);

numBeRang.Maximum = new decimal(new int[] { 20, 0, 0, 0 });

numBeRang.Minimum = new decimal(new int[] { 1, 0, 0, 0 });

numBeRang.Name = "numBeRang";

numBeRang.Size = new Size(120, 43);

numBeRang.TabIndex = 5;

numBeRang.Value = new decimal(new int[] { 1, 0, 0, 0 });

//

// chkBocRang

//

chkBocRang.Location = new Point(20, 227);

chkBocRang.Name = "chkBocRang";

chkBocRang.Size = new Size(168, 42);

chkBocRang.TabIndex = 6;

chkBocRang.Text = "Bọc răng 1.000.000đ/1 răng";

//

// numBocRang

//

numBocRang.Location = new Point(400, 239);

numBocRang.Maximum = new decimal(new int[] { 20, 0, 0, 0 });

numBocRang.Minimum = new decimal(new int[] { 1, 0, 0, 0 });

numBocRang.Name = "numBocRang";

numBocRang.Size = new Size(120, 43);

numBocRang.TabIndex = 7;

numBocRang.Value = new decimal(new int[] { 1, 0, 0, 0 });

//

// grpChucNang

//

grpChucNang.Controls.Add(btnTinhTien);

grpChucNang.Controls.Add(btnThoat);

grpChucNang.Location = new Point(20, 388);

grpChucNang.Name = "grpChucNang";

grpChucNang.Size = new Size(562, 103);

grpChucNang.TabIndex = 4;

grpChucNang.TabStop = false;

grpChucNang.Text = "Chức năng:";

//

// btnTinhTien

//

btnTinhTien.Location = new Point(62, 53);

btnTinhTien.Name = "btnTinhTien";

btnTinhTien.Size = new Size(86, 44);

btnTinhTien.TabIndex = 0;

btnTinhTien.Text = "Tính tiền";

btnTinhTien.Click += btnTinhTien\_Click;

//

// btnThoat

//

btnThoat.Location = new Point(261, 59);

btnThoat.Name = "btnThoat";

btnThoat.Size = new Size(93, 44);

btnThoat.TabIndex = 1;

btnThoat.Text = "Thoát";

btnThoat.Click += btnThoat\_Click;

//

// Form4

//

ClientSize = new Size(682, 525);

Controls.Add(lblHeader);

Controls.Add(lblTenKH);

Controls.Add(txtTenKH);

Controls.Add(grpDichVu);

Controls.Add(grpChucNang);

Font = new Font("Segoe UI", 10F);

Name = "Form4";

StartPosition = FormStartPosition.CenterScreen;

Text = "Phòng khám nha khoa Hải Âu";

grpDichVu.ResumeLayout(false);

((System.ComponentModel.ISupportInitialize)numHanRang).EndInit();

((System.ComponentModel.ISupportInitialize)numBeRang).EndInit();

((System.ComponentModel.ISupportInitialize)numBocRang).EndInit();

grpChucNang.ResumeLayout(false);

ResumeLayout(false);

PerformLayout();

}

}

}

Code .cs

using System;

using System.Drawing;

using System.Windows.Forms;

namespace TranThanhPhuong\_1150080165

{

public partial class Form4 : Form

{

public Form4()

{

InitializeComponent();

}

private void btnTinhTien\_Click(object sender, EventArgs e)

{

if (string.IsNullOrWhiteSpace(txtTenKH.Text))

{

MessageBox.Show("Vui lòng nhập tên khách hàng!", "Thông báo",

MessageBoxButtons.OK, MessageBoxIcon.Warning);

txtTenKH.Focus();

return;

}

double tongTien = 0;

if (chkLayCaoRang.Checked) tongTien += 50000;

if (chkTayTrangRang.Checked) tongTien += 100000;

if (chkHanRang.Checked) tongTien += (100000 \* (int)numHanRang.Value);

if (chkBeRang.Checked) tongTien += (10000 \* (int)numBeRang.Value);

if (chkBocRang.Checked) tongTien += (1000000 \* (int)numBocRang.Value);

MessageBox.Show($"Khách hàng: {txtTenKH.Text}\nTổng tiền: {tongTien:N0} VNĐ",

"Hóa đơn", MessageBoxButtons.OK, MessageBoxIcon.Information);

}

private void btnThoat\_Click(object sender, EventArgs e)

{

Application.Exit();

}

private void chkLayCaoRang\_CheckedChanged(object sender, EventArgs e)

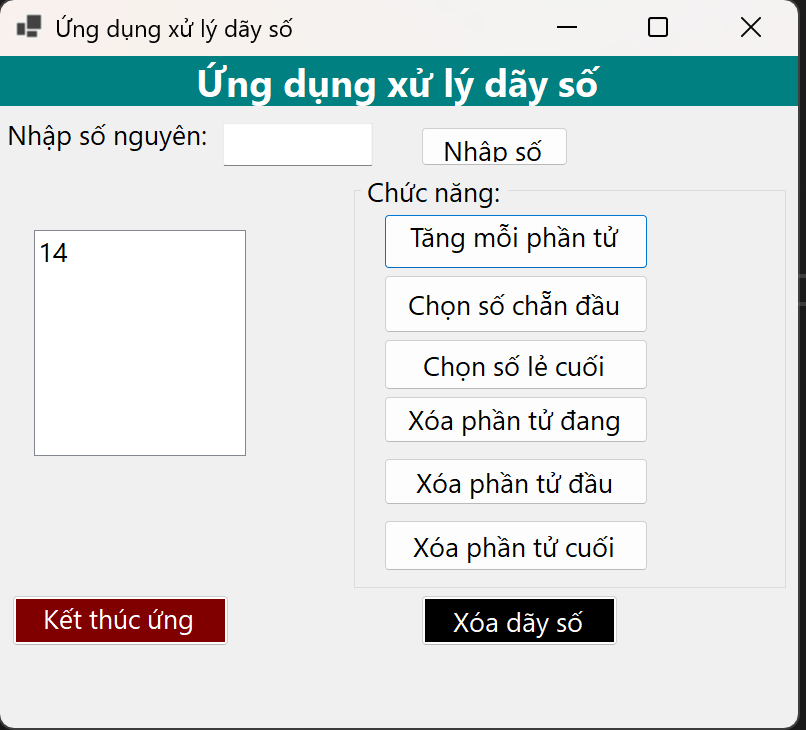
{

}

}

}

Thực hành 3:



Code .cs

using System;

using System.Windows.Forms;

namespace TranThanhPhuong\_1150080165

{

public partial class Form5 : Form

{

public Form5()

{

InitializeComponent();

// Gắn sự kiện

this.txtNhapSo.KeyPress += TxtNhapSo\_KeyPress;

this.txtNhapSo.KeyDown += TxtNhapSo\_KeyDown;

this.btnNhapSo.Click += btnNhapSo\_Click;

this.btnTang2.Click += btnTang2\_Click;

this.btnChonChanDau.Click += btnChonChanDau\_Click;

this.btnChonLeCuoi.Click += btnChonLeCuoi\_Click;

this.btnXoaDangChon.Click += btnXoaDangChon\_Click;

this.btnXoaDau.Click += btnXoaDau\_Click;

this.btnXoaCuoi.Click += btnXoaCuoi\_Click;

this.btnXoaDay.Click += btnXoaDay\_Click;

this.btnKetThuc.Click += btnKetThuc\_Click;

}

private void TxtNhapSo\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!char.IsControl(e.KeyChar) && !char.IsDigit(e.KeyChar) && e.KeyChar != '-')

e.Handled = true;

}

private void TxtNhapSo\_KeyDown(object sender, KeyEventArgs e)

{

if (e.KeyCode == Keys.Enter)

{

NhapSo();

e.SuppressKeyPress = true;

}

}

private void btnNhapSo\_Click(object sender, EventArgs e) => NhapSo();

private void NhapSo()

{

if (int.TryParse(txtNhapSo.Text.Trim(), out int so))

{

lsbDaySo.Items.Add(so);

txtNhapSo.Clear();

txtNhapSo.Focus();

}

else

{

MessageBox.Show("Vui lòng nhập số nguyên hợp lệ!");

}

}

private void btnTang2\_Click(object sender, EventArgs e)

{

for (int i = 0; i < lsbDaySo.Items.Count; i++)

lsbDaySo.Items[i] = Convert.ToInt32(lsbDaySo.Items[i]) + 2;

}

private void btnChonChanDau\_Click(object sender, EventArgs e)

{

for (int i = 0; i < lsbDaySo.Items.Count; i++)

{

if (Convert.ToInt32(lsbDaySo.Items[i]) % 2 == 0)

{

lsbDaySo.SelectedIndex = i;

return;

}

}

MessageBox.Show("Không có số chẵn nào!");

}

private void btnChonLeCuoi\_Click(object sender, EventArgs e)

{

for (int i = lsbDaySo.Items.Count - 1; i >= 0; i--)

{

if (Convert.ToInt32(lsbDaySo.Items[i]) % 2 != 0)

{

lsbDaySo.SelectedIndex = i;

return;

}

}

MessageBox.Show("Không có số lẻ nào!");

}

private void btnXoaDangChon\_Click(object sender, EventArgs e)

{

while (lsbDaySo.SelectedIndices.Count > 0)

lsbDaySo.Items.RemoveAt(lsbDaySo.SelectedIndices[0]);

}

private void btnXoaDau\_Click(object sender, EventArgs e)

{

if (lsbDaySo.Items.Count > 0)

lsbDaySo.Items.RemoveAt(0);

}

private void btnXoaCuoi\_Click(object sender, EventArgs e)

{

if (lsbDaySo.Items.Count > 0)

lsbDaySo.Items.RemoveAt(lsbDaySo.Items.Count - 1);

}

private void btnXoaDay\_Click(object sender, EventArgs e) => lsbDaySo.Items.Clear();

private void btnKetThuc\_Click(object sender, EventArgs e) => Application.Exit();

private void lblNhapSo\_Click(object sender, EventArgs e)

{

}

private void grpChucNang\_Enter(object sender, EventArgs e)

{

}

private void btnXoaCuoi\_Click\_1(object sender, EventArgs e)

{

}

private void btnXoaDangChon\_Click\_1(object sender, EventArgs e)

{

}

private void btnChonChanDau\_Click\_1(object sender, EventArgs e)

{

}

}

}

Code designer.cs

namespace TranThanhPhuong\_1150080165

{

partial class Form5

{

private System.ComponentModel.IContainer components = null;

private Label lblTitle, lblNhapSo;

private TextBox txtNhapSo;

private Button btnNhapSo, btnTang2, btnChonChanDau, btnChonLeCuoi,

btnXoaDangChon, btnXoaDau, btnXoaCuoi, btnXoaDay, btnKetThuc;

private ListBox lsbDaySo;

private GroupBox grpChucNang;

protected override void Dispose(bool disposing)

{

if (disposing && (components != null))

{

components.Dispose();

}

base.Dispose(disposing);

}

private void InitializeComponent()

{

lblTitle = new Label();

lblNhapSo = new Label();

txtNhapSo = new TextBox();

btnNhapSo = new Button();

lsbDaySo = new ListBox();

grpChucNang = new GroupBox();

btnTang2 = new Button();

btnChonChanDau = new Button();

btnChonLeCuoi = new Button();

btnXoaDangChon = new Button();

btnXoaDau = new Button();

btnXoaCuoi = new Button();

btnKetThuc = new Button();

btnXoaDay = new Button();

grpChucNang.SuspendLayout();

SuspendLayout();

//

// lblTitle

//

lblTitle.BackColor = Color.Teal;

lblTitle.Dock = DockStyle.Top;

lblTitle.Font = new Font("Segoe UI", 14F, FontStyle.Bold);

lblTitle.ForeColor = Color.White;

lblTitle.Location = new Point(0, 0);

lblTitle.Name = "lblTitle";

lblTitle.Size = new Size(798, 50);

lblTitle.TabIndex = 0;

lblTitle.Text = "Ứng dụng xử lý dãy số";

lblTitle.TextAlign = ContentAlignment.MiddleCenter;

//

// lblNhapSo

//

lblNhapSo.AutoSize = true;

lblNhapSo.Location = new Point(0, 59);

lblNhapSo.Name = "lblNhapSo";

lblNhapSo.Size = new Size(217, 37);

lblNhapSo.TabIndex = 1;

lblNhapSo.Text = "Nhập số nguyên:";

lblNhapSo.Click += lblNhapSo\_Click;

//

// txtNhapSo

//

txtNhapSo.Location = new Point(223, 67);

txtNhapSo.Name = "txtNhapSo";

txtNhapSo.Size = new Size(150, 43);

txtNhapSo.TabIndex = 2;

//

// btnNhapSo

//

btnNhapSo.Location = new Point(421, 71);

btnNhapSo.Name = "btnNhapSo";

btnNhapSo.Size = new Size(147, 39);

btnNhapSo.TabIndex = 3;

btnNhapSo.Text = "Nhập số";

//

// lsbDaySo

//

lsbDaySo.ItemHeight = 37;

lsbDaySo.Location = new Point(34, 174);

lsbDaySo.Name = "lsbDaySo";

lsbDaySo.Size = new Size(212, 226);

lsbDaySo.TabIndex = 4;

//

// grpChucNang

//

grpChucNang.Controls.Add(btnTang2);

grpChucNang.Controls.Add(btnChonChanDau);

grpChucNang.Controls.Add(btnChonLeCuoi);

grpChucNang.Controls.Add(btnXoaDangChon);

grpChucNang.Controls.Add(btnXoaDau);

grpChucNang.Controls.Add(btnXoaCuoi);

grpChucNang.Location = new Point(354, 116);

grpChucNang.Name = "grpChucNang";

grpChucNang.Size = new Size(432, 417);

grpChucNang.TabIndex = 5;

grpChucNang.TabStop = false;

grpChucNang.Text = "Chức năng:";

grpChucNang.Enter += grpChucNang\_Enter;

//

// btnTang2

//

btnTang2.Location = new Point(30, 42);

btnTang2.Name = "btnTang2";

btnTang2.Size = new Size(264, 55);

btnTang2.TabIndex = 0;

btnTang2.Text = "Tăng mỗi phần tử lên 2";

//

// btnChonChanDau

//

btnChonChanDau.Location = new Point(30, 103);

btnChonChanDau.Name = "btnChonChanDau";

btnChonChanDau.Size = new Size(264, 58);

btnChonChanDau.TabIndex = 1;

btnChonChanDau.Text = "Chọn số chẵn đầu";

btnChonChanDau.Click += btnChonChanDau\_Click\_1;

//

// btnChonLeCuoi

//

btnChonLeCuoi.Location = new Point(30, 167);

btnChonLeCuoi.Name = "btnChonLeCuoi";

btnChonLeCuoi.Size = new Size(264, 51);

btnChonLeCuoi.TabIndex = 2;

btnChonLeCuoi.Text = "Chọn số lẻ cuối";

//

// btnXoaDangChon

//

btnXoaDangChon.Location = new Point(30, 224);

btnXoaDangChon.Name = "btnXoaDangChon";

btnXoaDangChon.Size = new Size(264, 47);

btnXoaDangChon.TabIndex = 3;

btnXoaDangChon.Text = "Xóa phần tử đang chọn";

btnXoaDangChon.Click += btnXoaDangChon\_Click\_1;

//

// btnXoaDau

//

btnXoaDau.Location = new Point(30, 286);

btnXoaDau.Name = "btnXoaDau";

btnXoaDau.Size = new Size(264, 47);

btnXoaDau.TabIndex = 4;

btnXoaDau.Text = "Xóa phần tử đầu";

//

// btnXoaCuoi

//

btnXoaCuoi.Location = new Point(30, 348);

btnXoaCuoi.Name = "btnXoaCuoi";

btnXoaCuoi.Size = new Size(264, 51);

btnXoaCuoi.TabIndex = 5;

btnXoaCuoi.Text = "Xóa phần tử cuối";

btnXoaCuoi.Click += btnXoaCuoi\_Click\_1;

//

// btnKetThuc

//

btnKetThuc.BackColor = Color.Maroon;

btnKetThuc.ForeColor = Color.White;

btnKetThuc.Location = new Point(12, 539);

btnKetThuc.Name = "btnKetThuc";

btnKetThuc.Size = new Size(217, 51);

btnKetThuc.TabIndex = 6;

btnKetThuc.Text = "Kết thúc ứng dụng";

btnKetThuc.UseVisualStyleBackColor = false;

//

// btnXoaDay

//

btnXoaDay.BackColor = Color.Black;

btnXoaDay.ForeColor = Color.White;

btnXoaDay.Location = new Point(421, 539);

btnXoaDay.Name = "btnXoaDay";

btnXoaDay.Size = new Size(197, 51);

btnXoaDay.TabIndex = 7;

btnXoaDay.Text = "Xóa dãy số";

btnXoaDay.UseVisualStyleBackColor = false;

//

// Form5

//

ClientSize = new Size(798, 672);

Controls.Add(lblTitle);

Controls.Add(lblNhapSo);

Controls.Add(txtNhapSo);

Controls.Add(btnNhapSo);

Controls.Add(lsbDaySo);

Controls.Add(grpChucNang);

Controls.Add(btnKetThuc);

Controls.Add(btnXoaDay);

Font = new Font("Segoe UI", 10F);

Name = "Form5";

StartPosition = FormStartPosition.CenterScreen;

Text = "Ứng dụng xử lý dãy số";

grpChucNang.ResumeLayout(false);

ResumeLayout(false);

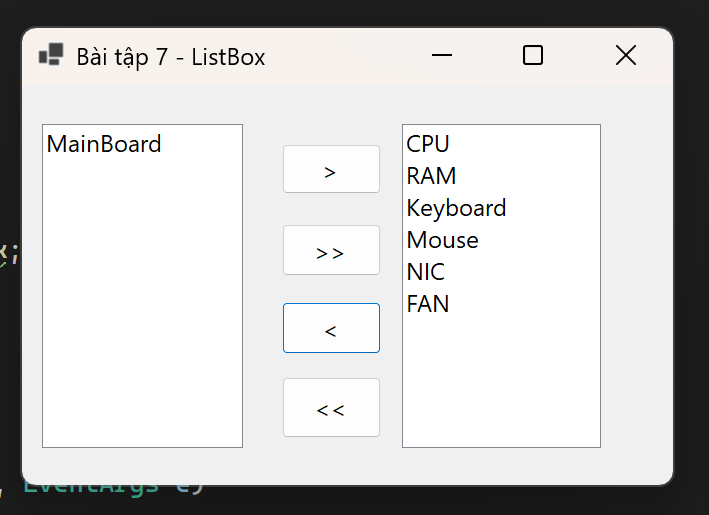
PerformLayout();

}

}

}

Bài 7 :

code form.cs

using System;

using System.Windows.Forms;

namespace TranThanhPhuong\_1150080165

{

public partial class Form6 : Form

{

public Form6()

{

InitializeComponent();

// Gán sự kiện cho các nút

btnRight.Click += btnRight\_Click;

btnRightAll.Click += btnRightAll\_Click;

btnLeft.Click += btnLeft\_Click;

btnLeftAll.Click += btnLeftAll\_Click;

}

// Chuyển 1 mục sang phải

private void btnRight\_Click(object sender, EventArgs e)

{

if (lstMatHang.SelectedItem != null)

{

lstDaChon.Items.Add(lstMatHang.SelectedItem);

lstMatHang.Items.Remove(lstMatHang.SelectedItem);

}

}

// Chuyển tất cả sang phải

private void btnRightAll\_Click(object sender, EventArgs e)

{

foreach (var item in lstMatHang.Items)

lstDaChon.Items.Add(item);

lstMatHang.Items.Clear();

}

// Chuyển 1 mục về trái

private void btnLeft\_Click(object sender, EventArgs e)

{

if (lstDaChon.SelectedItem != null)

{

lstMatHang.Items.Add(lstDaChon.SelectedItem);

lstDaChon.Items.Remove(lstDaChon.SelectedItem);

}

}

// Chuyển tất cả về trái

private void btnLeftAll\_Click(object sender, EventArgs e)

{

foreach (var item in lstDaChon.Items)

lstMatHang.Items.Add(item);

lstDaChon.Items.Clear();

}

}

}

Code designer.cs

namespace TranThanhPhuong\_1150080165

{

partial class Form6

{

private System.ComponentModel.IContainer components = null;

private ListBox lstMatHang;

private ListBox lstDaChon;

private Button btnRight, btnRightAll, btnLeft, btnLeftAll;

protected override void Dispose(bool disposing)

{

if (disposing && (components != null))

{

components.Dispose();

}

base.Dispose(disposing);

}

private void InitializeComponent()

{

lstMatHang = new ListBox();

lstDaChon = new ListBox();

btnRight = new Button();

btnRightAll = new Button();

btnLeft = new Button();

btnLeftAll = new Button();

SuspendLayout();

//

// lstMatHang

//

lstMatHang.Items.AddRange(new object[] { "CPU", "MainBoard", "RAM", "Keyboard", "Mouse", "NIC", "FAN" });

lstMatHang.Location = new Point(20, 40);

lstMatHang.Name = "lstMatHang";

lstMatHang.Size = new Size(201, 324);

lstMatHang.TabIndex = 0;

//

// lstDaChon

//

lstDaChon.Location = new Point(380, 40);

lstDaChon.Name = "lstDaChon";

lstDaChon.Size = new Size(199, 324);

lstDaChon.TabIndex = 1;

//

// btnRight

//

btnRight.Location = new Point(260, 60);

btnRight.Name = "btnRight";

btnRight.Size = new Size(99, 50);

btnRight.TabIndex = 2;

btnRight.Text = ">";

//

// btnRightAll

//

btnRightAll.Location = new Point(260, 140);

btnRightAll.Name = "btnRightAll";

btnRightAll.Size = new Size(99, 52);

btnRightAll.TabIndex = 3;

btnRightAll.Text = ">>";

//

// btnLeft

//

btnLeft.Location = new Point(260, 218);

btnLeft.Name = "btnLeft";

btnLeft.Size = new Size(99, 52);

btnLeft.TabIndex = 4;

btnLeft.Text = "<";

//

// btnLeftAll

//

btnLeftAll.Location = new Point(260, 293);

btnLeftAll.Name = "btnLeftAll";

btnLeftAll.Size = new Size(99, 61);

btnLeftAll.TabIndex = 5;

btnLeftAll.Text = "<<";

//

// Form6

//

ClientSize = new Size(651, 401);

Controls.Add(lstMatHang);

Controls.Add(lstDaChon);

Controls.Add(btnRight);

Controls.Add(btnRightAll);

Controls.Add(btnLeft);

Controls.Add(btnLeftAll);

Name = "Form6";

StartPosition = FormStartPosition.CenterScreen;

Text = "Bài tập 7 - ListBox";

ResumeLayout(false);

}

}

}