**22. Технология Windows Form. Работа с формами**

Задание №1: Составьте программу табулирования функции y(x), выведите на экран значения x и y(x).

y= |x–b|1/2 / |b3–x3|3/2 + ln|x–b|,

x0= –0.73; xk= –1.73; dx= –0.1;

b= –2;

Листинг программы:

namespace LabWork2

{

partial class MainForm

{

private System.ComponentModel.IContainer components = null;

protected override void Dispose(bool disposing)

{

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

{

components.Dispose();

}

base.Dispose(disposing);

}

#region Windows Form Designer generated code

private void InitializeComponent()

{

this.lblTitle = new System.Windows.Forms.Label();

this.lblY1 = new System.Windows.Forms.Label();

this.lblY2 = new System.Windows.Forms.Label();

this.lblZ = new System.Windows.Forms.Label();

this.txtY1 = new System.Windows.Forms.TextBox();

this.txtY2 = new System.Windows.Forms.TextBox();

this.txtZ = new System.Windows.Forms.TextBox();

this.txtResults = new System.Windows.Forms.TextBox();

this.btnStart = new System.Windows.Forms.Button();

this.btnHappiness = new System.Windows.Forms.Button();

this.SuspendLayout();

this.lblTitle.AutoSize = true;

this.lblTitle.Font = new System.Drawing.Font("Microsoft Sans Serif", 10F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.lblTitle.Location = new System.Drawing.Point(20, 20);

this.lblTitle.Name = "lblTitle";

this.lblTitle.Size = new System.Drawing.Size(274, 20);

this.lblTitle.TabIndex = 0;

this.lblTitle.Text = "p = (min(f(x), y) - max(y, z)) / 2";

this.lblY1.AutoSize = true;

this.lblY1.Location = new System.Drawing.Point(20, 60);

this.lblY1.Name = "lblY1";

this.lblY1.Size = new System.Drawing.Size(26, 16);

this.lblY1.TabIndex = 1;

this.lblY1.Text = "Y1:";

this.lblY2.AutoSize = true;

this.lblY2.Location = new System.Drawing.Point(20, 90);

this.lblY2.Name = "lblY2";

this.lblY2.Size = new System.Drawing.Size(26, 16);

this.lblY2.TabIndex = 2; this.lblY2.Text = "Y2:";

this.lblZ.AutoSize = true;

this.lblZ.Location = new System.Drawing.Point(20, 120);

this.lblZ.Name = "lblZ";

this.lblZ.Size = new System.Drawing.Size(18, 16);

this.lblZ.TabIndex = 3;

this.lblZ.Text = "Z:";

this.txtY1.Location = new System.Drawing.Point(60, 57);

this.txtY1.Name = "txtY1";

this.txtY1.ReadOnly = true;

this.txtY1.Size = new System.Drawing.Size(100, 22);

this.txtY1.TabIndex = 4;

this.txtY2.Location = new System.Drawing.Point(60, 87);

this.txtY2.Name = "txtY2";

this.txtY2.ReadOnly = true;

this.txtY2.Size = new System.Drawing.Size(100, 22);

this.txtY2.TabIndex = 5;

this.txtZ.Location = new System.Drawing.Point(60, 117);

this.txtZ.Name = "txtZ";

this.txtZ.ReadOnly = true;

this.txtZ.Size = new System.Drawing.Size(100, 22);

this.txtZ.TabIndex = 6;

this.txtResults.Location = new System.Drawing.Point(24, 160);

this.txtResults.Multiline = true;

this.txtResults.Name = "txtResults";

this.txtResults.ReadOnly = true;

this.txtResults.Size = new System.Drawing.Size(300, 120);

this.txtResults.TabIndex = 7;

this.btnStart.Location = new System.Drawing.Point(24, 300);

this.btnStart.Name = "btnStart";

this.btnStart.Size = new System.Drawing.Size(100, 30);

this.btnStart.TabIndex = 8;

this.btnStart.Text = "Пуск";

this.btnStart.UseVisualStyleBackColor = true;

this.btnStart.Click += new System.EventHandler(this.btnStart\_Click);

this.btnHappiness.Location = new System.Drawing.Point(150, 300);

this.btnHappiness.Name = "btnHappiness";

this.btnHappiness.Size = new System.Drawing.Size(100, 30);

this.btnHappiness.TabIndex = 9;

this.btnHappiness.Text = "Очистить";

this.btnHappiness.UseVisualStyleBackColor = true;

this.btnHappiness.Click += new System.EventHandler(this.btnHappiness\_Click);

this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.ClientSize = new System.Drawing.Size(350, 350);

this.Controls.Add(this.btnHappiness);

this.Controls.Add(this.btnStart);

this.Controls.Add(this.txtResults);

this.Controls.Add(this.txtZ);

this.Controls.Add(this.txtY2);

this.Controls.Add(this.txtY1);

this.Controls.Add(this.lblZ);

this.Controls.Add(this.lblY2);

this.Controls.Add(this.lblY1);

this.Controls.Add(this.lblTitle);

this.Name = "MainForm";

this.ResumeLayout(false);

this.PerformLayout();

}

#endregion

private System.Windows.Forms.Label lblTitle;

private System.Windows.Forms.Label lblY1;

private System.Windows.Forms.Label lblY2;

private System.Windows.Forms.Label lblZ;

private System.Windows.Forms.TextBox txtY1;

private System.Windows.Forms.TextBox txtY2;

private System.Windows.Forms.TextBox txtZ;

private System.Windows.Forms.TextBox txtResults;

private System.Windows.Forms.Button btnStart;

private System.Windows.Forms.Button btnHappiness;

}

}

Анализ результатов:

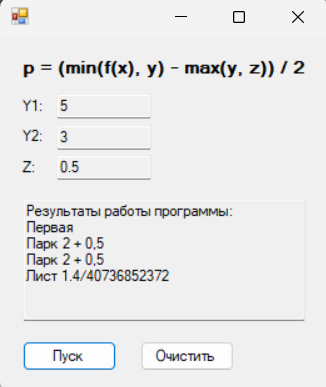


Рисунок 22.1 – Результат работы программы