

Puzzle Numeric

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Informatica I

Urmatorul program este renumitul joc Puzzle Numeric.

Regulile jocului sunt simple:

În total sunt 9 casute, în care apar numerele de la 1-8, iar una dintre casute este liberă.

Având posibilitatea de a muta doar acele casute din jurul celei libere, aceste trebuie mutate până când ordinea numerelor din casute este de la 1-9 de la stânga la dreapta de sus în jos. Când ordinea numerelor de la 1-8 este corectă, puzzle-ul este automat completat cu cifra 9!

Codul sursă:

```
#pragma once
#include<ctime>
#include<stdlib.h>
#include<algorithm>
#include<cassert>
#include<functional>
#include<time.h>

namespace puzzlenumere {
    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
```

```

/// <summary>
/// Summary for Form1
/// </summary>
publicrefclass Form1 : public System::Windows::Forms::Form
{
public:
    Form1(void)
    {
        InitializeComponent();
        //
        //TODO: Add the constructor code here
        //
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    ~Form1()
    {
        if (components)
        {
            delete components;
        }
    }

private: System::Windows::Forms::Button^ button1;
protected:
private: System::Windows::Forms::Button^ button2;
private: System::Windows::Forms::Button^ button3;
private: System::Windows::Forms::Button^ button4;
private: System::Windows::Forms::Button^ button5;
private: System::Windows::Forms::Button^ button6;
private: System::Windows::Forms::Button^ button7;
private: System::Windows::Forms::Button^ button8;
private: System::Windows::Forms::Button^ button9;
private: System::Windows::Forms::Label^ label1;
private: System::Windows::Forms::Label^ label2;

```

```

private: System::ComponentModel::IContainer^ components;

```

```

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>

```

```

#pragmaregion Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    voidInitializeComponent(void)
    {

```

```

this->button1 = (gcnew System::Windows::Forms::Button());
this->button2 = (gcnew System::Windows::Forms::Button());
this->button3 = (gcnew System::Windows::Forms::Button());
this->button4 = (gcnew System::Windows::Forms::Button());
this->button5 = (gcnew System::Windows::Forms::Button());
this->button6 = (gcnew System::Windows::Forms::Button());
this->button7 = (gcnew System::Windows::Forms::Button());
this->button8 = (gcnew System::Windows::Forms::Button());
this->button9 = (gcnew System::Windows::Forms::Button());
this->label1 = (gcnew System::Windows::Forms::Label());
this->label2 = (gcnew System::Windows::Forms::Label());
this->SuspendLayout();
//
// button1
//
this->button1->BackColor = System::Drawing::SystemColors::Control;
this->button1->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button1->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->button1->ForeColor =
System::Drawing::SystemColors::ControlText;
this->button1->Location = System::Drawing::Point(54, 46);
this->button1->Margin = System::Windows::Forms::Padding(5);
this->button1->Name = L"button1";
this->button1->Size = System::Drawing::Size(50, 50);
this->button1->TabIndex = 0;
this->button1->Text = L"1";
this->button1->UseVisualStyleBackColor = false;
this->button1->Click += gcnew System::EventHandler(this,
&Form1::button1_Click);
this->button1->MouseEnter += gcnew System::EventHandler(this,
&Form1::button1_MouseEnter);
this->button1->MouseLeave += gcnew System::EventHandler(this,
&Form1::button1_MouseLeave);
//
// button2
//
this->button2->BackColor = System::Drawing::SystemColors::Control;
this->button2->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button2->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->button2->Location = System::Drawing::Point(104, 46);
this->button2->Margin = System::Windows::Forms::Padding(5);
this->button2->Name = L"button2";
this->button2->Size = System::Drawing::Size(50, 50);
this->button2->TabIndex = 1;
this->button2->Text = L"6";
this->button2->UseVisualStyleBackColor = false;
this->button2->Click += gcnew System::EventHandler(this,
&Form1::button2_Click);
this->button2->MouseEnter += gcnew System::EventHandler(this,
&Form1::button2_MouseEnter);
this->button2->MouseLeave += gcnew System::EventHandler(this,
&Form1::button2_MouseLeave_1);
//
// button3

```

```

//
this->button3->BackColor = System::Drawing::SystemColors::Control;
this->button3->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button3->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->button3->Location = System::Drawing::Point(154, 46);
this->button3->Margin = System::Windows::Forms::Padding(5);
this->button3->Name = L"button3";
this->button3->Size = System::Drawing::Size(50, 50);
this->button3->TabIndex = 2;
this->button3->Text = L"3";
this->button3->UseVisualStyleBackColor = false;
this->button3->Click += gcnew System::EventHandler(this,
&Form1::button3_Click);
this->button3->MouseEnter += gcnew System::EventHandler(this,
&Form1::button3_MouseEnter);
this->button3->MouseLeave += gcnew System::EventHandler(this,
&Form1::button3_MouseLeave);
//
// button4
//
this->button4->BackColor = System::Drawing::SystemColors::Control;
this->button4->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button4->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->button4->Location = System::Drawing::Point(54, 91);
this->button4->Margin = System::Windows::Forms::Padding(5);
this->button4->Name = L"button4";
this->button4->Size = System::Drawing::Size(50, 50);
this->button4->TabIndex = 3;
this->button4->Text = L"4";
this->button4->UseVisualStyleBackColor = false;
this->button4->Click += gcnew System::EventHandler(this,
&Form1::button4_Click);
this->button4->MouseEnter += gcnew System::EventHandler(this,
&Form1::button4_MouseEnter);
this->button4->MouseLeave += gcnew System::EventHandler(this,
&Form1::button4_MouseLeave);
//
// button5
//
this->button5->BackColor = System::Drawing::SystemColors::Control;
this->button5->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button5->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->button5->Location = System::Drawing::Point(104, 91);
this->button5->Margin = System::Windows::Forms::Padding(5);
this->button5->Name = L"button5";
this->button5->Size = System::Drawing::Size(50, 50);
this->button5->TabIndex = 4;
this->button5->Text = L"5";
this->button5->UseVisualStyleBackColor = false;
this->button5->Click += gcnew System::EventHandler(this,
&Form1::button5_Click);

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        this->button5->MouseEnter += gcnew System::EventHandler(this,
&Form1::button5_MouseEnter);
        this->button5->MouseLeave += gcnew System::EventHandler(this,
&Form1::button5_MouseLeave);
        //
        // button6
        //
        this->button6->BackColor = System::Drawing::SystemColors::Control;
        this->button6->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button6->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->button6->Location = System::Drawing::Point(154, 91);
        this->button6->Margin = System::Windows::Forms::Padding(5);
        this->button6->Name = L"button6";
        this->button6->Size = System::Drawing::Size(50, 50);
        this->button6->TabIndex = 5;
        this->button6->Text = L"7";
        this->button6->UseVisualStyleBackColor = false;
        this->button6->Click += gcnew System::EventHandler(this,
&Form1::button6_Click);
        this->button6->MouseEnter += gcnew System::EventHandler(this,
&Form1::button6_MouseEnter);
        this->button6->MouseLeave += gcnew System::EventHandler(this,
&Form1::button6_MouseLeave);
        //
        // button7
        //
        this->button7->BackColor = System::Drawing::SystemColors::Control;
        this->button7->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button7->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->button7->Location = System::Drawing::Point(54, 141);
        this->button7->Margin = System::Windows::Forms::Padding(5);
        this->button7->Name = L"button7";
        this->button7->Size = System::Drawing::Size(50, 50);
        this->button7->TabIndex = 6;
        this->button7->Text = L"2";
        this->button7->UseVisualStyleBackColor = false;
        this->button7->Click += gcnew System::EventHandler(this,
&Form1::button7_Click);
        this->button7->MouseEnter += gcnew System::EventHandler(this,
&Form1::button7_MouseEnter);
        this->button7->MouseLeave += gcnew System::EventHandler(this,
&Form1::button7_MouseLeave);
        //
        // button8
        //
        this->button8->BackColor = System::Drawing::SystemColors::Control;
        this->button8->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button8->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->button8->Location = System::Drawing::Point(104, 141);
        this->button8->Margin = System::Windows::Forms::Padding(5);
        this->button8->Name = L"button8";
        this->button8->Size = System::Drawing::Size(50, 50);

```

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        this->button8->TabIndex = 7;
        this->button8->UseVisualStyleBackColor = false;
        this->button8->Click += gcnew System::EventHandler(this,
&Form1::button8_Click);
        this->button8->MouseEnter += gcnew System::EventHandler(this,
&Form1::button8_MouseEnter);
        this->button8->MouseLeave += gcnew System::EventHandler(this,
&Form1::button8_MouseLeave);
        //
        // button9
        //
        this->button9->BackColor = System::Drawing::SystemColors::Control;
        this->button9->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button9->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->button9->Location = System::Drawing::Point(154, 141);
        this->button9->Margin = System::Windows::Forms::Padding(5);
        this->button9->Name = L"button9";
        this->button9->Size = System::Drawing::Size(50, 50);
        this->button9->TabIndex = 8;
        this->button9->Text = L"8";
        this->button9->UseVisualStyleBackColor = false;
        this->button9->Click += gcnew System::EventHandler(this,
&Form1::button9_Click);
        this->button9->MouseEnter += gcnew System::EventHandler(this,
&Form1::button9_MouseEnter);
        this->button9->MouseLeave += gcnew System::EventHandler(this,
&Form1::button9_MouseLeave);
        //
        // label1
        //
        this->label1->AutoSize = true;
        this->label1->Font = (gcnew System::Drawing::Font(L"Microsoft Sans
Serif", 15.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label1->ForeColor = System::Drawing::Color::Maroon;
        this->label1->Location = System::Drawing::Point(12, 210);
        this->label1->Name = L"label1";
        this->label1->Size = System::Drawing::Size(242, 25);
        this->label1->TabIndex = 9;
        this->label1->Text = L"Felicitari! Aticastigat!";
        this->label1->Visible = false;
        this->label1->Click += gcnew System::EventHandler(this,
&Form1::label1_Click);
        //
        // label2
        //
        this->label2->AutoSize = true;
        this->label2->Font = (gcnew System::Drawing::Font(L"Comic Sans MS",
15.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label2->ForeColor = System::Drawing::Color::DeepSkyBlue;
        this->label2->Location = System::Drawing::Point(31, 9);
        this->label2->Name = L"label2";
        this->label2->Size = System::Drawing::Size(193, 30);
        this->label2->TabIndex = 10;
        this->label2->Text = L"NUMBER PUZZLE";

```

```

//
// Form1
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoScaleMode = System::Windows::Forms::AutoScaleMode::Font;
this->BackColor = System::Drawing::Color::LightGreen;
this->ClientSize = System::Drawing::Size(268, 286);
this->Controls->Add(this->label2);
this->Controls->Add(this->label1);
this->Controls->Add(this->button9);
this->Controls->Add(this->button8);
this->Controls->Add(this->button7);
this->Controls->Add(this->button6);
this->Controls->Add(this->button5);
this->Controls->Add(this->button4);
this->Controls->Add(this->button3);
this->Controls->Add(this->button2);
this->Controls->Add(this->button1);
this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedToolWindow;
this->Name = L"Form1";
this->Text = L"Number Puzzle";
this->Load += gcnew System::EventHandler(this, &Form1::Form1_Load);
this->ResumeLayout(false);
this->PerformLayout();

}
void verificare(void)
{
    if((this->button1->Text=="1")&&(this->button2->Text=="2")&&(this->button3->Text=="3")&&
        (this->button4->Text=="4")&&(this->button5->Text=="5")&&(this->button6->Text=="6")&&
        (this->button7->Text=="7")&&(this->button8->Text=="8")&&(this->button9->Text==""))
    {
        this->button9->Text="9";
        this->label1->Visible=true;
        this->label1->Text="Aticastigat! Felicitari";
    }
}
#pragma endregion
private: System::Void button1_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button2->Text=="")
    {
        this->button2->Text=this->button1->Text;
        this->button1->Text="";
        verificare();
    }
    if(this->button4->Text=="")
    {
        this->button4->Text=this->button1->Text;
        this->button1->Text="";
        verificare();
    }
}
private: System::Void label1_Click(System::Object^ sender, System::EventArgs^ e) {

```

```

    }
private: System::Void button2_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button1->Text=="")
    {
        this->button1->Text=this->button2->Text;
        this->button2->Text="";
        verificare();
    }
    if(this->button5->Text=="")
    {
        this->button5->Text=this->button2->Text;
        this->button2->Text="";
        verificare();
    }
    if(this->button3->Text=="")
    {
        this->button3->Text=this->button2->Text;
        this->button2->Text="";
        verificare();
    }
}
private: System::Void button3_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button2->Text=="")
    {
        this->button2->Text=this->button3->Text;
        this->button3->Text="";
        verificare();
    }
    if(this->button6->Text=="")
    {
        this->button6->Text=this->button3->Text;
        this->button3->Text="";
        verificare();
    }
}
private: System::Void button4_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button1->Text=="")
    {
        this->button1->Text=this->button4->Text;
        this->button4->Text="";
        verificare();
    }
    if(this->button5->Text=="")
    {
        this->button5->Text=this->button4->Text;
        this->button4->Text="";
        verificare();
    }
    if(this->button7->Text=="")
    {
        this->button7->Text=this->button4->Text;
        this->button4->Text="";
        verificare();
    }
}
private: System::Void button5_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button2->Text=="")

```



```

        {
            this->button2->Text=this->button5->Text;
            this->button5->Text="";
            verificare();
        }
        if(this->button4->Text=="")
        {
            this->button4->Text=this->button5->Text;
            this->button5->Text="";
            verificare();
        }
        if(this->button6->Text=="")
        {
            this->button6->Text=this->button5->Text;
            this->button5->Text="";
            verificare();
        }
        if(this->button8->Text=="")
        {
            this->button8->Text=this->button5->Text;
            this->button5->Text="";
            verificare();
        }
    }
private: System::Void button6_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button3->Text=="")
    {
        this->button3->Text=this->button6->Text;
        this->button6->Text="";
        verificare();
    }
    if(this->button5->Text=="")
    {
        this->button5->Text=this->button6->Text;
        this->button6->Text="";
        verificare();
    }
    if(this->button9->Text=="")
    {
        this->button9->Text=this->button6->Text;
        this->button6->Text="";
        verificare();
    }
}
private: System::Void button7_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button4->Text=="")
    {
        this->button4->Text=this->button7->Text;
        this->button7->Text="";
        verificare();
    }
    if(this->button8->Text=="")
    {
        this->button8->Text=this->button7->Text;
        this->button7->Text="";
        verificare();
    }
}

```

```

    }

}

private: System::Void button8_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button7->Text=="")
    {
        this->button7->Text=this->button8->Text;
        this->button8->Text="";
        verificare();
    }
    if(this->button5->Text=="")
    {
        this->button5->Text=this->button8->Text;
        this->button8->Text="";
        verificare();
    }
    if(this->button9->Text=="")
    {
        this->button9->Text=this->button8->Text;
        this->button8->Text="";
        verificare();
    }
}

private: System::Void button9_Click(System::Object^ sender, System::EventArgs^ e) {
    if(this->button8->Text=="")
    {
        this->button8->Text=this->button9->Text;
        this->button9->Text="";
        verificare();
    }
    if(this->button6->Text=="")
    {
        this->button6->Text=this->button9->Text;
        this->button9->Text="";
        verificare();
    }
}

private: System::Void button1_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button1->BackColor=System::Drawing::Color::Crimson;
    this->button1->ForeColor=System::Drawing::SystemColors::HotTrack;
}

private: System::Void Form1_Load(System::Object^ sender, System::EventArgs^ e)
{
    time_t time;
    srand(64523);
    array<int>^ v = gcnewarray<int>(9){0,1,2,3,4,5,6,7,8};
    array<int>^ v1 = gcnewarray<int>(9){0,1,2,3,4,5,6,7,8};
    int i=0;
    do
    {
        int x=rand()%9;
        int^ aux;
        aux=v[x];
        v[x]=0;
        if(aux!=0)
        {
            v[i]=aux;

```

```

        i++;
    }
}while(v[8]==0);
/*
this->label1->Text="";
this->label1->Visible=true;
*/
for(int i=0;i<9;i++)
{
    this->label1->Text+=System::Convert::ToString(v[i]);
}
// v={0,1,2,3,4,5,6,7,8};
//random_shuffle(&v[0],&v[9]);
if(v[0]==0)
{
    this->button1->Text="";
}
else
{
    this->button1->Text=System::Convert::ToString(v[0]);
};
if(v[1]==0)
{
    this->button2->Text="";
}
else
{
    this->button2->Text=System::Convert::ToString(v[1]);
};
if(v[2]==0)
{
    this->button3->Text="";
}
else
{
    this->button3->Text=System::Convert::ToString(v[2]);
};
if(v[3]==0)
{
    this->button4->Text="";
}
else
{
    this->button4->Text=System::Convert::ToString(v[3]);
};
if(v[4]==0)
{
    this->button5->Text="";
}
else
{
    this->button5->Text=System::Convert::ToString(v[4]);
};
if(v[5]!=0)
{
    this->button6->Text=System::Convert::ToString(v[5]);
}
else

```

```

        {
            this->button6->Text="";
        };
        if(v[6]==0)
        {
            this->button7->Text="";
        }
        else
        {
            this->button7->Text=System::Convert::ToString(v[6]);
        };
        if(v[7]==0)
        {
            this->button8->Text="";
        }
        else
        {
            this->button8->Text=System::Convert::ToString(v[7]);
        };
        if(v[8]==0)
        {
            this->button9->Text="";
        }
        else
        {
            this->button9->Text=System::Convert::ToString(v[8]);
        };
    */

    }
private: System::Void button1_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button1->BackColor=System::Drawing::SystemColors::Control;
    this->button1->ForeColor=System::Drawing::SystemColors::ControlText;
}

private: System::Void button2_MouseLeave_1(System::Object^ sender, System::EventArgs^ e) {
    this->button2->BackColor=System::Drawing::SystemColors::Control;
    this->button2->ForeColor=System::Drawing::SystemColors::ControlText;
}
private: System::Void button2_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button2->BackColor=System::Drawing::Color::Crimson;
    this->button2->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button3_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button3->BackColor=System::Drawing::Color::Crimson;
    this->button3->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button3_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button3->BackColor=System::Drawing::SystemColors::Control;
    this->button3->ForeColor=System::Drawing::SystemColors::ControlText;
}

```

```

private: System::Void button4_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button4->BackColor=System::Drawing::Color::Crimson;
    this->button4->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button4_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button4->BackColor=System::Drawing::SystemColors::Control;
    this->button4->ForeColor=System::Drawing::SystemColors::ControlText;
}
private: System::Void button5_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button5->BackColor=System::Drawing::Color::Crimson;
    this->button5->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button5_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button5->BackColor=System::Drawing::SystemColors::Control;
    this->button5->ForeColor=System::Drawing::SystemColors::ControlText;
}
private: System::Void button6_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button6->BackColor=System::Drawing::Color::Crimson;
    this->button6->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button6_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button6->BackColor=System::Drawing::SystemColors::Control;
    this->button6->ForeColor=System::Drawing::SystemColors::ControlText;
}
private: System::Void button7_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button7->BackColor=System::Drawing::Color::Crimson;
    this->button7->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button7_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button7->BackColor=System::Drawing::SystemColors::Control;
    this->button7->ForeColor=System::Drawing::SystemColors::ControlText;
}
private: System::Void z(System::Object^ sender,
System::Windows::Forms::WebBrowserDocumentCompletedEventArgs^ e) {
}
private: System::Void button8_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button8->BackColor=System::Drawing::Color::Crimson;
    this->button8->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button9_MouseEnter(System::Object^ sender, System::EventArgs^ e)
{
    this->button9->BackColor=System::Drawing::Color::Crimson;
    this->button9->ForeColor=System::Drawing::SystemColors::HotTrack;
}
private: System::Void button9_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button9->BackColor=System::Drawing::SystemColors::Control;
    this->button9->ForeColor=System::Drawing::SystemColors::ControlText;
}

```

```

private: System::Void button8_MouseLeave(System::Object^ sender, System::EventArgs^ e)
{
    this->button8->BackColor=System::Drawing::SystemColors::Control;
    this->button8->ForeColor=System::Drawing::SystemColors::ControlText;
}

};
}

```

