EC 2010

COMPUTER PROGRAMMING

LAB 04

NAME   **:RENUJAN J.**

REGISTRATION NO. :2022/E/065

DATE ASSIGNED   **:19 Oct 2023**
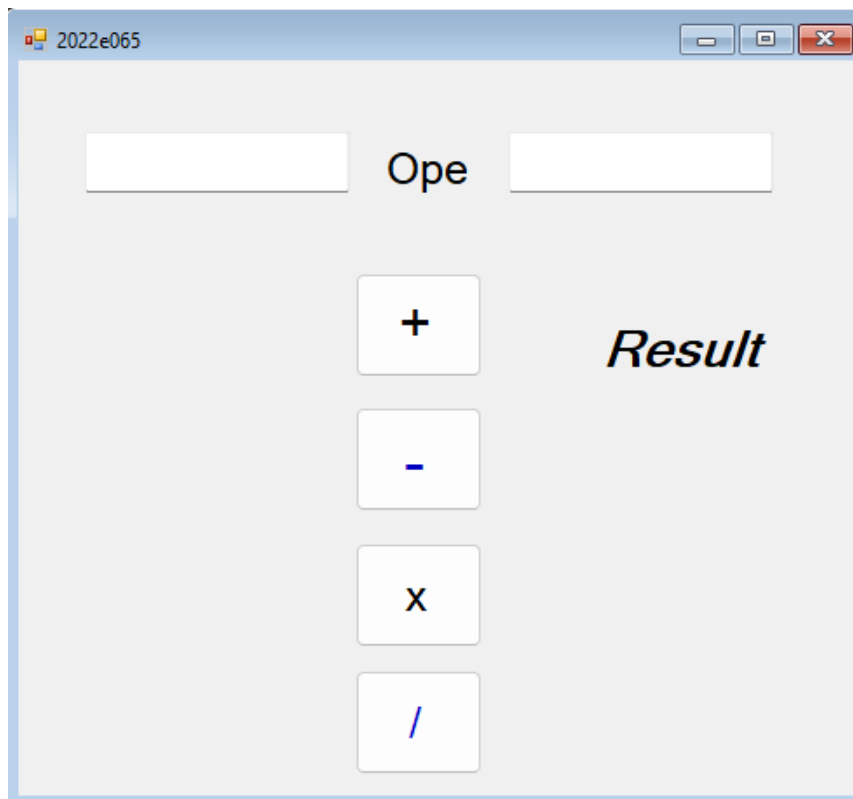
QUESTION 01

CPP Script

```
MyForm.h    ₊    MyForm.cpp*  ₊ ✕  MyForm.h [Design]
GUI2022e065_01                        (Global Scope)
 1    // RENUJAN J.
 2    // 2022/E/065
 3    // EC2010
 4    // Group: B
 5    // Lab: 04
 6    // Program Description: [A simple arithmetic Calculator to do the basic arithmetic operations.]
 7    // Certificate of Authenticity:
 8    // I certify that the code in the method function main of this project
 9    // is entirely my own work.
10    // Follow this with a description of the type of assistance.
11
12    #include "MyForm.h"
13
14    using namespace System;
15    using namespace System::Windows::Forms;
16    [STAThreadAttribute]
17
18    void main(array<String^>^ args) {
19        Application::SetCompatibleTextRenderingDefault(false);
20        Application::EnableVisualStyles();
21        GUI2022e06501::MyForm frm;
22        Application::Run(% frm);
23    }
```
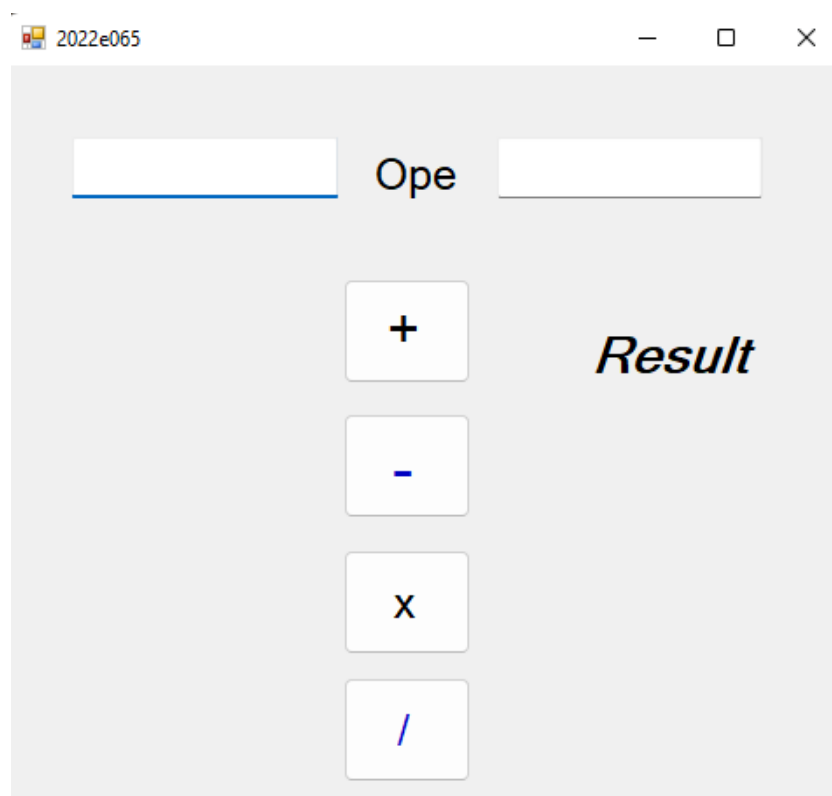
Design

h Script

```
MyForm.h*  ╤ ✕  MyForm.cpp*     MyForm.h [Design]*
GUI2022e065_01                              ▼    (Global Scope)                                    ▼

174                          │
175                        }
176      #pragma endregion
177        private: System::Void button1_Click(System::Object^ sender, System::EventArgs^ e) {
178            label1->Text = " +";
179            double results = System::Convert::ToDouble(textBox1->Text) + System::Convert::ToDouble(textBox2->Text);
180            label2->Text = "= " + System::Convert::ToString(results);
181        }
182        private: System::Void button2_Click(System::Object^ sender, System::EventArgs^ e) {
183            label1->Text = " -";
184            double results = System::Convert::ToDouble(textBox1->Text) - System::Convert::ToDouble(textBox2->Text);
185            label2->Text = "= " + System::Convert::ToString(results);
186        }
187    private: System::Void button3_Click(System::Object^ sender, System::EventArgs^ e) {
188        label1->Text = " x";
189        double results = System::Convert::ToDouble(textBox1->Text) * System::Convert::ToDouble(textBox2->Text);
190        label2->Text = "= " + System::Convert::ToString(results);
191    }
192    private: System::Void button4_Click(System::Object^ sender, System::EventArgs^ e) {
193        label1->Text = " /";
194        double results = System::Convert::ToDouble(textBox1->Text) / System::Convert::ToDouble(textBox2->Text);
195        label2->Text = "= " + System::Convert::ToString(results);
196    }
197    };
198    }
199
```

Result

Get Input

2022e065

| 10 | Ope | 3 |

+

-

x

/

Result

Addition

2022e065

| 10 | + | 3 |

+

-

x

/

= 13

Subtraction

2022e065

| 10 | - | 3 |

+

-

x

/

= 7

Multiplication

2022e065

| 10 | x | 3 |

+

-

x

/

= 30

Division

2022e065

| 10 | / | 3 |

+

-

x

/

= 3.3333333

QUESTION 02

CPP Script

```
GUI2022e065_02                    (Global Scope)
1    // RENUJAN J.
2    // 2022/E/065
3    // EC2010
4    //Group: B
5    // Lab: 04
6    // Program Description: [Clicks on the picture word related to that only appear on the screen.]
7    // Certificate of Authenticity:
8    // I certify that the code in the method function main of this project
9    // is entirely my own work.
10   // Follow this with a description of the type of assistance.
11
12    #include "MyForm.h"
13
14   using namespace System;
15    using namespace System::Windows::Forms;
16    [STAThreadAttribute]
17
18   void main(array<String^>^ args) {
19       Application::SetCompatibleTextRenderingDefault(false);
20       Application::EnableVisualStyles();
21       GUI2022e06502::MyForm frm;
22       Application::Run(% frm);
23   }
24
```
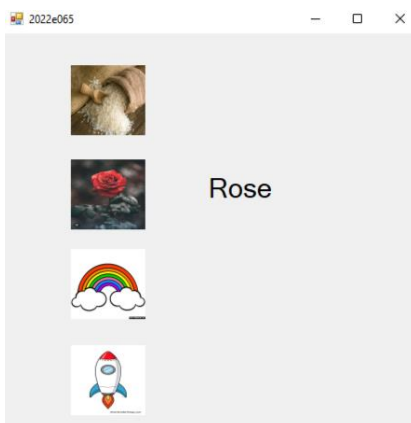
Design

h Script


```cpp
180
181                }
182      #pragma endregion
183          private: System::Void pictureBox1_Click(System::Object^ sender, System::EventArgs^ e) {
184              label1 -> Visible = true;
185              this->label1->Text = "Rise";
186              label2->Hide(), label3->Hide(), label4->Hide();
187          }
188      private: System::Void pictureBox2_Click(System::Object^ sender, System::EventArgs^ e) {
189              label2->Visible = true;
190              this->label2->Text = "Rose";
191              label1->Hide(), label3->Hide(), label4->Hide();
192          }
193      private: System::Void pictureBox3_Click(System::Object^ sender, System::EventArgs^ e) {
194              label3->Visible = true;
195              this->label3->Text = "Rainbow";
196              label1->Hide(), label2->Hide(), label4->Hide();
197          }
198      private: System::Void pictureBox4_Click(System::Object^ sender, System::EventArgs^ e) {
199              label4->Visible = true;
200              this->label4->Text = "Rocket";
201              label1->Hide(), label2->Hide(), label3->Hide();
202          }
203      };
204      }
205
```
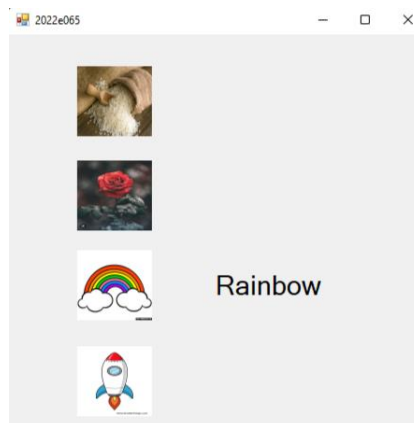
Result   When click the picture 1
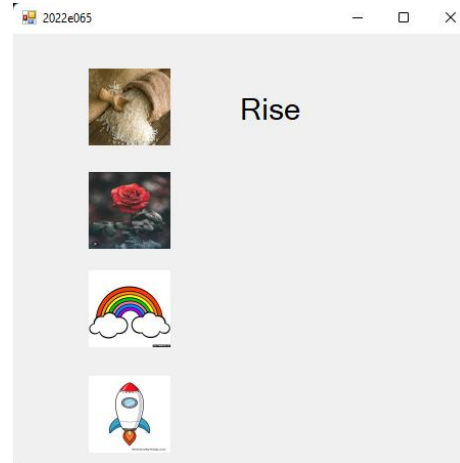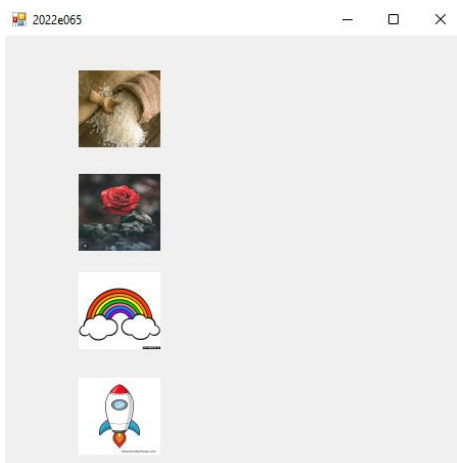
When click the picture 2   When click the picture 3   When click the picture 4