



PROJECT REPORT
FOR SOFTWARE ENGINEERING PROJECT- DSE 12.1 FT
MODULE DSE 104

Index No.	Student Name with Initials
DSE121FT02	Abeysekara P.
DSE121FT07	Aravinda W.R.V.G.N.
DSE121FT41	Rathnayake K.B.N.B.
DSE121FT43	Samarasekara V.V.
DSE121FT50	Weerasuriya W.A.P.S.

Certification-

This is to certify that the work contained herein are the sole and original creations of Abeysekara P., Aravinda W.R.V.G.N., Rathnayake K.B.N.B., Samarasekara V.V and Weerasuriya W.A.P.S. and that no other external or referential creation/ source by a third-party, other than those cited, were taken-up/ included in the making of this Project. All ownership of this Project resides with the aforementioned Creators.

MOLE® - MOLE is a registered ™ of Rathnayake K.B.N.B.

Creative Commons License- This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.

Acknowledgement-

We gratefully dedicate this project to our Lecturers, for their heartfelt support and guidance given to us throughout the course of the Diploma and beyond, without which, this project would not have been a reality.

-CONTENTS-

<u>Section</u>	<u>Page No.</u>
I. Introduction	i
II. Problem Definition	iii
III. Software Requirements	v
IV. Software Functionalities and Components	vii
V. Advantages to the User	xiii
VI. User Resource Management	xv
VII. Coding and Design	01
a) Software	02
i. MOLE Standard Interface Files	03
1. CoreControls.h	03
2. resource.h	04
ii. MOLE Home Screen	05
1. baseF.cpp	07

2. baseF.h	07
iii. Remember These! Tips	42
1. rem.cpp	47
2. rem.h	45
3. rem_theorem.cpp	61
4. rem_theorem.h	61
iv. About MOLE	67
1. about.cpp	67
2. about.h	67
v. My Profile	84
1. myP.cpp	84
2. myP.h	84
vi. My Friends	121
1. loadContent.cpp	121
2. loadContent.h	121
3. base.cpp	123
4. base.h	123
5. searchR.cpp	169
6. searchR.h	169
7. resource.h	177
8. MFriend.java	178
vii. My Friends Progress	187
1. resource.h	187
2. baseF.cpp	188
3. baseF.h	188

viii.	Calculators	216
	1. resource.h	216
	2. baseF.cpp	217
	3. baseF.h	217
	4. aStart.cpp (Area Calculator)	233
	5. aStart.h (Area Calculator)	233
	6. apCal.cpp (Arithmetic Progressions Calculator)	242
	7. apCal.h (Arithmetic Progressions Calculator)	242
	8. bis.cpp (Buisness and Shares Calculator)	269
	9. bis.h (Buisness and Shares Calculator)	269
	10. gp.cpp (Geometric Progressions Calculator)	281
	11. gp.h (Geometric Progressions Calculator)	282
	12. percen.cpp (Percentages Calculator)	294
	13. percen.h (Percentages Calculator)	295
	14. pyth.cpp (Pythagoras Theorem Calculator)	320
	15. pyth.h (Pythagoras Theorem Calculator)	321
ix.	Examinations	333
	1. resource.h	333
	2. coreControls.h	334
	3. apE.cpp (Arithmetic Progressions Examination)	343
	4. apE.h (Arithmetic Progressions Examination)	344
	5. ForU.cpp (Formulae Examination)	370
	6. ForU.h(Formulae Examination)	371
	7. freqD.cpp(Frequency Distribution Examination)	401
	8. freqD.h(Frequency Distribution Examination)	402
	9. scaD.cpp (Scale Diagrams Examination)	429
	10. scaD.h (Scale Diagrams Examination)	430
	11. showR.cpp	455
	12. showR.h	455

x.	Lessons	460
1.	lessonBase.cpp	460
2.	lessonBase.h	461
3.	resource.h	464
4.	resource1.h	464
5.	peri.cpp (Perimeter)	465
6.	peri.h(Perimeter)	468
7.	formu.cpp (Formulae)	478
8.	formu.h(Formulae)	479
xi.	MOLE Start	492
1.	mainM.java	492
2.	login.java	494
xii.	MOLE Sender	506
1.	MSender.java	506
b) Website		510
i.	Home Page	511
1.	index.php	512
2.	style.css	517
3.	reset.css	530
4.	mainstyle.css	531
5.	layout.css	532
ii.	Download MOLE	533
1.	download.php	533
iii.	MOLE Register	538
1.	StudentSignup.php	538
2.	userReg.php	544

3. maincontrols.js	546
iv. MOLE Account Activation	549
1. success.php	549
2. uData.php	553
3. userReg.php	554
v. About Us	556
1. about.php	556
vi. Contact Us	561
1. contact.php	561
2. confirm.php	566
vii. Sign In	572
1. signin.php	572
2. userL.php	578
3. connectMe2.php	578
viii. My Profile	579
1. MyProfile.php	579
2. personalData.php	587
3. profile.js	588
4. TemplateControl.js	590
ix. Image Uploader	591
1. uLoadP.php	591
2. uLp.php	593

x.	Page Not Found	594
	1. page-not-found.php	594
xi.	Friend Management	599
	1. adReFriend.php	599
	2. displayF.php	599
	3. friend.php	600
	4. friendAdd.php	601
xii.	Examination Results Management	602
	1. examData.php	602
	2. examS_R.php	603
c)	Database	604
i.	examNames.sql	605
ii.	mainDB.sql	607

I. Introduction

In the present Sri Lankan context, the need to learn Mathematics at School Level has increased considerably due to the noteworthy percentage of failures generated each year for the subject at the annual Ordinary Level Examination. One of the major reasons for this disappointing turn of events is the lack of quality School Input by teachers, due to numerous restrictions and externally influenced factors.

Still in this era, Sri Lanka is struggling to move forward with the Student Centered Model of Learning. Instead, it has become an unbalanced hybrid, which is still vastly dependent on the teacher. The emergence of new technological innovations, such as E-Learning; has paved the way for more approachable and feasible Educational Instruments to be developed. However, the deciding factor-a feasible structure for true implementation is, as of yet, still being thrown about between various individual efforts, and lacks a proper initiative; which considers Student Participation as its core-interest.

But by integrating distance learning methods with a locally executable approach, computer software can access this core-interest effectively, while bridging technically difficult challenges more practically. MOLE, or Mathematics for Ordinary Level Examination; is a Software Project which carries the potential to address this need. MOLE is an Electronic teacher which would help students to work with difficult calculations and at the same time, intuitively teach them how to solve them on their own.

The School chosen for the implementation of the Project is- JMC International School, Kaduwela. And while being a private and non-national school, it suits the nature of the project very well, and presents several requirements which could ideally be addressed by our implementation.

MOLE is based upon the 4 current National Textbooks and the 2 accompanying Teachers Guides, prepared by the National Institute of Education, Maharagama. This makes it fully compatible and compliant with the annual O/L Examination.

The 2 basic components of the project; the Software and the Website, considers technical, fiscal and user factors in its deployment. These would be detailed further in the proceeding sections of this report.

II. Problem Definition

Identified Scenario: A student goes to School and listen to his/her Math teacher, and after School goes to tuition and listens to the tuition master and comes home. After that, he starts to study/practice Math, but suddenly he/she find a problem that he/she can't solve or doesn't know whether the solved answer is correct. So, the student would think, "I will run to Math teachers'/ tuition masters' home to ask for the answer", is this practical?

This is the **basic** problem faced by the average O/L Student as identified by us, and is the **basis** for our project modeling.

It's made for both regular O/L School Applicants and repeat Candidates. The Project was done in English.

III. Software Requirements

The **MOLE** Software would include the following data inputs from the User:

1. User Account Information
2. Lesson Status Details
3. Examination Submissions

The utilized Programming Languages for the Software are:

1. Microsoft Visual C++
2. Java
3. J2EE

The utilized Programming Languages for the Website are:

1. HTML
2. mySQL (for dB)
3. PHP
4. JavaScript
5. AJAX

The Software used to design the Project are:

1. Microsoft Visual Studio
2. Adobe Dreamweaver
3. Oracle NetBeans
4. WampServer
5. Adobe Photoshop

The main identified list of requirements includes:

1. Understandable Lessons
2. Straight-forward Examinations
3. A controllable method of communication between Peers
4. Workable Calculators
5. A feasible and customizable interface
6. A centralized hub for the Software and overall Project

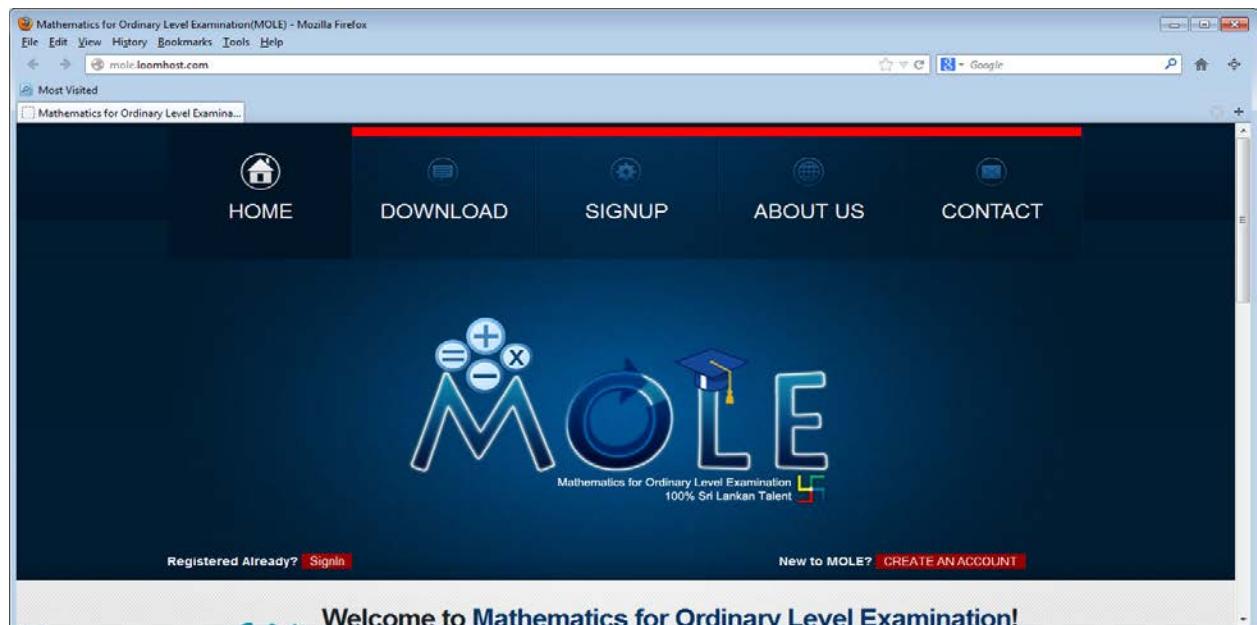
IV. Software Functionalities and Components

The main **components** of the Project are:

1. Software

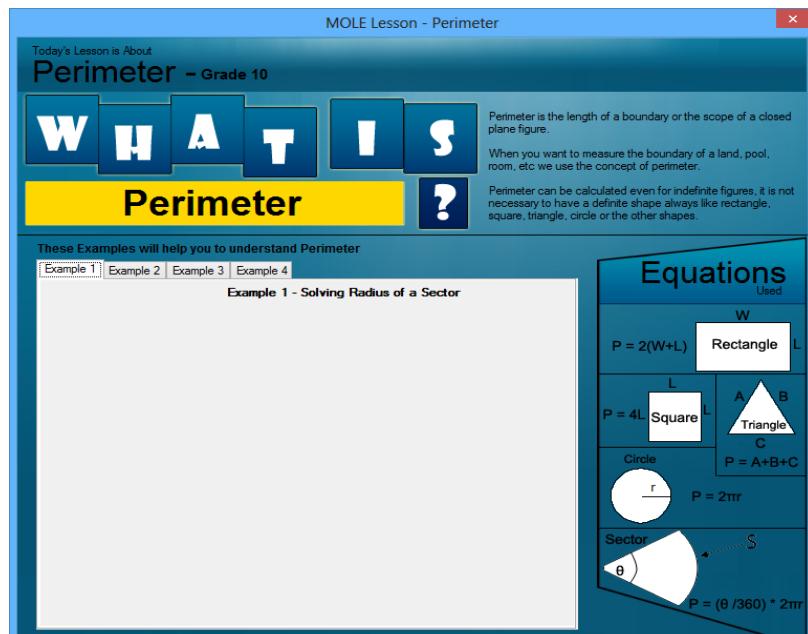


2. Website, with database

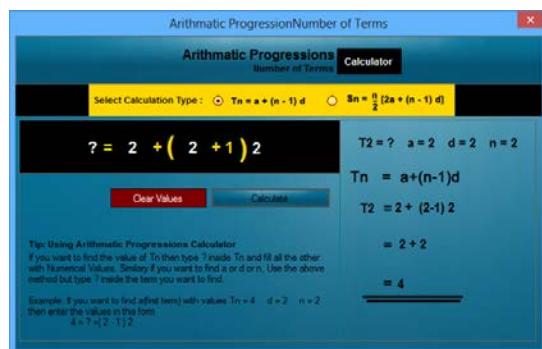


The main **functions** to be performed by the Software, according to the requirements are:

1. Correct and understandable Subject explanations and details; with examples, formulas and notational charts



2. Useful Calculators for the Student



3. Challenging, yet enjoyable Examinations

Arithmetic Progressions

Arithmetic Progressions

Your Examination Progress

Current Exam Progress = 0 Last Exam Progress = 0 0:30:52 Exam in Progress

Find the 6th term of the arithmetic progression: 5,8,11,...

Q1

- A) 45
- B) 5
- C) 13
- D) 20

The first 4 values of the progression having $a=7$ and $d=2$ is,

Q2

- A) 4,6,8,10
- B) 7,9,11,13
- C) 7,14,21,28
- D) 7,12,17,22

An arithmetic progression has a common difference of 4.5 and its 7th term is -85, what are its first and 3rd terms?

Q3

- A) 67,85
- B) -112,-94
- C) -67,-85
- D) 94,112

The arithmetic mean of 56 and -94 is,

4. A tracking and chat system of users' Friends

Basura Ratnayake's Friends

Enter his/her Username to Search

Search for a Friend

Search


punarjeewa

No Friend

5. A customizable UI

The features of the website (and accompanying dB) are:

1. Management of User Profiles
2. A hub for download of the Software

III. Advantages to the User

“Think not Math as another war to fight but as a challenge worthy of taking”

- The MOLE Team -

The major advantages to be gained by the User through the implementation of the Software, with website are:

1. Since it's based on the National Curriculum, it's the perfect accompaniment for the Student, whose only ally is his/ her textbook
2. Real-time Lesson comprehension and accurate calculators makes the daily burden of the Student far less cumbersome
3. Learning virtually would motivate, inspire and fascinate the regular Student
4. Student could work at both Home and School
5. Strategic chat time-outs would keep the Students' mind on Math
6. Totally Free-of-charge Software
7. Both Online and Offline Work Modes, less resource consumption and throughputs

IV. User Resource Management

The Software is designed to run on a fairly low-end machine, and as such, would use only a few system requirements. However, it does need several pre-installed Environments and Packages to be present on the Machine. These would not be bundled in the Software Setup due to the increase in size (which would only be nearly about 100MB). The main system requirements are-

Operating System: Microsoft Windows 7/ 8

Disk Capacity: About 100MB

User Requirement: An online MOLE Account

Additional Packages required: Microsoft .NET Framework, Java Runtime Environment

VI. Coding and Design

a) Software

Each Application of the Software has an amount of source and header files written for them using Microsoft Visual C++, Java and J2EE. The interface designs resulting from these sources are presented as screenshots above their coding. The part of the Software is given, along with the names of all the files.

i. MOLE Standard Interface Files

1. CoreControls.h

```
#pragma once
namespace MOLE {
    using namespace System::IO;
    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;
    public ref class Core{
        public:
            void doShow(String^ a, String^ b){
                StreamWriter^ sw = gcnew StreamWriter(
Application::ExecutablePath->Replace("MOLE.exe", "config.ms"));
                sw->WriteLine("ETYPE = "+a);
                sw->WriteLine("FILE = user//"+b);
                sw->Close();
                System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("MOLE.exe", "mCore.exe"))->WaitForExit();
            }
    };
}
```

2. resource.h

```
//{{NO_DEPENDENCIES}}
// Microsoft Visual C++ generated include file.
// Used by MOLE.rc
//
#define IDI_ICON1           101

// Next default values for new objects
//
#ifndef APSTUDIO_INVOKED
#ifndef APSTUDIO_READONLY_SYMBOLS
#define _APS_NEXT_RESOURCE_VALUE    102
#define _APS_NEXT_COMMAND_VALUE     40001
#define _APS_NEXT_CONTROL_VALUE     1001
#define _APS_NEXT_SYMED_VALUE       101
#endif
#endif
```

ii. MOLE Home Screen

Mathematics for Ordinary Level Examination (MOLE)

File View Options ★ Remember these! MOLE

My Examination Progress

- Examinations Passed : 0
- Examinations Failed : 3
- Completed Percentage = 0%

Lesson List 1

Arithmetic Progressions $T_n = a + (n - 1)d$	Area	Binomial Expressions $(x + y)^n$	Business and Shares	Chords of a Circle

1 2 Page 1 of 2

"Knowledge is the Greatest Treasure Achievable"

07-Dec-13 8:19:19 PM

My Tools

- Friend Chat
- Personalize
- Calculators

Mathematics for Ordinary Level Examination (MOLE)

File View Options ★ Remember these! MOLE

My Examination Progress

- Examinations Passed : 0
- Examinations Failed : 3
- Completed Percentage = 0%

Lesson List 2

Percentages	Perimeter	Probability	Pythagoras Theorem $a^2 + b^2 = c^2$	Ratio 4:3
Rational Numbers $1/3 = 0.333$	Sets	Representation of Data	Speed	Square Root \sqrt{a}
Surface Area of Solids	Real Numbers $\sqrt{ab} = \sqrt{a} \times \sqrt{b}$	Tangents	Tax and Insurance +%	Trigonometry
				Triangles
				Volume of Solids

Friend Chat Personalize Calculators

1 2 Page 2 of 2

"Knowledge is the Greatest Treasure Achievable"

08-Dec-13 11:56:21 AM

Good Day, Basura

Putha Don't think about the past, Thomas Alva Edison failed 1000 times before he invented the Bulb. Always try and never giveup. You are still only 20, you have a long

Days Left for O/L Exam: 1

Ok, Sir

1. baseF.cpp

```
#include "baseF.h"

using namespace MOLE; //the project name in your header file

[STAThreadAttribute]
int main(array<System::String ^> ^args)
{
    Application::EnableVisualStyles();
    Application::SetCompatibleTextRenderingDefault(false);

    Application::Run(gcnew baseF());
    return 0;
}
```

2. baseF.h

```
#pragma once
#include <fstream>
#include "about.h"
#include "myP.h"
#include "rem.h"
#include "greet.h"
#include "CoreControls.h"

namespace MOLE {

    using namespace std;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System;
    using namespace System::IO;

    /// <summary>
    /// Summary for baseF
    /// </summary>
    public ref class baseF : public System::Windows::Forms::Form
    {
    public:
        baseF(void)
        {
            InitializeComponent();
            greet g;
            g.ShowDialog();
            dyn->Enabled=true;

        }
        Core C;
    public:
        internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem2;
```

```

    String^ userName;

    void getData(){
        try{
            C.doShow("D", "exams.ms");
            C.doShow("D", "log.ms");
            StreamReader^ sr = gcnew StreamReader(
Application::ExecutablePath->Replace("MOLE.exe","user\\exams.ms"));
            StreamReader^ sr1 = gcnew StreamReader(
Application::ExecutablePath->Replace("MOLE.exe","user\\log.ms"));
            userName = sr1->ReadLine()->Substring(11);
            sr1->Close();
            String^ pass;
            String^ fail;
            pass = sr->ReadLine()->Substring(5);
            fail = sr->ReadLine()->Substring(5);
            examP->Text=pass;
            examF ->Text=fail;
            double p = (System::Convert::ToInt16(pass)*100)/42 ;
            completeP->Text=System::Convert::ToString(p) + "%";
            sr->Close();
            C.doShow("E", "exams.ms");
            C.doShow("E", "log.ms");
        }catch (System::Exception^ e){
            MessageBox::Show("We Encountered a Problem. " + e->Message + "
Try reinstalling the Application");
            exit( 0 );
        }
    }
    void showLesson(){
        this->container_p1->Size = System::Drawing::Size(519, 430);
        this->container_p1->Location = System::Drawing::Point(11, 3);
        this->container_p1->Visible = true;
        this->container_p2->Visible = false;
        this->container_p1->BringToFront();
        CurrentPageNo->Text="Page 1 of 2";
    }
    void showLink(String^ url){
        try{
            System::Diagnostics::Process::Start(url);
        }catch (Exception^ ex){
            MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
        }
    }
protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>a
    ~baseF()
    {
        if (components)
        {
            delete components;
        }
    }
}

```

```

private: System::Windows::Forms::Panel^ lessonContainer;
protected:
internal: System::Windows::Forms::Panel^ pControlPanel;
private:
private: System::Windows::Forms::Label^ CurrentPageNo;
internal:
internal: System::Windows::Forms::Button^ p1BTN;
private:
private: System::Windows::Forms::ToolTip^ ttip;
internal:
internal: System::Windows::Forms::Button^ p2BTN;
private:
private: System::Windows::Forms::Panel^ container_p1;
internal:
private: System::Windows::Forms::Label^ label1;
private: System::Windows::Forms::Button^ p1_17;
private: System::Windows::Forms::Button^ p1_22;
private: System::Windows::Forms::Button^ p1_7;
private: System::Windows::Forms::Button^ p1_2;
private: System::Windows::Forms::Button^ p1_5;
private: System::Windows::Forms::Button^ p1_4;
private: System::Windows::Forms::Button^ p1_3;
private: System::Windows::Forms::Button^ p1_8;
private: System::Windows::Forms::Button^ p1_12;
private: System::Windows::Forms::Button^ p1_21;
private: System::Windows::Forms::Button^ p1_16;
private: System::Windows::Forms::Button^ p1_15;
private: System::Windows::Forms::Button^ p1_14;
private: System::Windows::Forms::Button^ p1_13;
private: System::Windows::Forms::Button^ p1_11;
private: System::Windows::Forms::Button^ p1_25;
private: System::Windows::Forms::Button^ p1_24;
private: System::Windows::Forms::Button^ p1_23;
private: System::Windows::Forms::Button^ p1_20;
private: System::Windows::Forms::Button^ p1_19;
private: System::Windows::Forms::Button^ p1_18;
private: System::Windows::Forms::Button^ p1_1;
private: System::Windows::Forms::Button^ p1_10;
private: System::Windows::Forms::Button^ p1_9;
private: System::Windows::Forms::Button^ p1_6;
internal: System::Windows::Forms::StatusStrip^ mstatus;
private:
internal: System::Windows::Forms::ToolStripStatusLabel^ saying;
internal: System::Windows::Forms::ToolStripStatusLabel^ caps;
internal: System::Windows::Forms::ToolStripStatusLabel^ num;
internal: System::Windows::Forms::ToolStripStatusLabel^ dayt;
private: System::Windows::Forms::MenuStrip^ mmenu;
internal:
private: System::Windows::Forms::ToolStripMenuItem^ fileToolStripMenuItem;

private: System::Windows::Forms::ToolStripMenuItem^ exitToolStripMenuItem;
private: System::Windows::Forms::ToolStripMenuItem^ viewToolStripMenuItem;

private:
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem4;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem5;

```

```

internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem9;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem6;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem7;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem12;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem13;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem14;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem15;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem16;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem17;
internal: System::Windows::Forms::ToolStripMenuItem^ toolStripMenuItem18;

private: System::Windows::Forms::Button^ friendChat;
internal:
private: System::Windows::Forms::Panel^ toolbar1;
private: System::Windows::Forms::Label^ completeP;
private: System::Windows::Forms::Label^ examF;
private: System::Windows::Forms::Label^ examP;
private: System::Windows::Forms::Button^ btnExam;
private: System::Windows::Forms::Button^ btnFriendsProgress;
private: System::Windows::Forms::Button^ btnFriends;
private: System::Windows::Forms::Button^ btnMyProfile;

private: System::Windows::Forms::Button^ calCu;
private: System::Windows::Forms::Button^ Personalize;
private: System::Windows::Forms::Panel^ toolbar2;
private: System::Windows::Forms::Timer^ dyn;
private: System::Windows::Forms::Panel^ container_p2;
private: System::Windows::Forms::Label^ label2;
private: System::Windows::Forms::Button^ button1;

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::Button^ button11;
private: System::Windows::Forms::Button^ button12;
private: System::Windows::Forms::Button^ button13;
private: System::Windows::Forms::Button^ button14;
private: System::Windows::Forms::Button^ button15;

private: System::Windows::Forms::Button^ button22;
private: System::Windows::Forms::Button^ button23;
private: System::Windows::Forms::Button^ button24;
private: System::Windows::Forms::Button^ button25;
private: System::ComponentModel::.IContainer^ components;

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

```

```

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(baseF::typeid));
        this->lessonContainer = (gcnew System::Windows::Forms::Panel());
        this->container_p1 = (gcnew System::Windows::Forms::Panel());
        this->label1 = (gcnew System::Windows::Forms::Label());
        this->p1_17 = (gcnew System::Windows::Forms::Button());
        this->p1_22 = (gcnew System::Windows::Forms::Button());
        this->p1_7 = (gcnew System::Windows::Forms::Button());
        this->p1_2 = (gcnew System::Windows::Forms::Button());
        this->p1_5 = (gcnew System::Windows::Forms::Button());
        this->p1_4 = (gcnew System::Windows::Forms::Button());
        this->p1_3 = (gcnew System::Windows::Forms::Button());
        this->p1_8 = (gcnew System::Windows::Forms::Button());
        this->p1_12 = (gcnew System::Windows::Forms::Button());
        this->p1_21 = (gcnew System::Windows::Forms::Button());
        this->p1_16 = (gcnew System::Windows::Forms::Button());
        this->p1_15 = (gcnew System::Windows::Forms::Button());
        this->p1_14 = (gcnew System::Windows::Forms::Button());
        this->p1_13 = (gcnew System::Windows::Forms::Button());
        this->p1_11 = (gcnew System::Windows::Forms::Button());
        this->p1_25 = (gcnew System::Windows::Forms::Button());
        this->p1_24 = (gcnew System::Windows::Forms::Button());
        this->p1_23 = (gcnew System::Windows::Forms::Button());
        this->p1_20 = (gcnew System::Windows::Forms::Button());
        this->p1_19 = (gcnew System::Windows::Forms::Button());
        this->p1_18 = (gcnew System::Windows::Forms::Button());
        this->p1_1 = (gcnew System::Windows::Forms::Button());
        this->p1_10 = (gcnew System::Windows::Forms::Button());
        this->p1_9 = (gcnew System::Windows::Forms::Button());
        this->p1_6 = (gcnew System::Windows::Forms::Button());
        this->container_p2 = (gcnew System::Windows::Forms::Panel());
        this->label2 = (gcnew System::Windows::Forms::Label());
        this->button1 = (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->button11 = (gcnew System::Windows::Forms::Button());
        this->button12 = (gcnew System::Windows::Forms::Button());
        this->button13 = (gcnew System::Windows::Forms::Button());
        this->button14 = (gcnew System::Windows::Forms::Button());
        this->button15 = (gcnew System::Windows::Forms::Button());
        this->button22 = (gcnew System::Windows::Forms::Button());
        this->button23 = (gcnew System::Windows::Forms::Button());
        this->button24 = (gcnew System::Windows::Forms::Button());
        this->button25 = (gcnew System::Windows::Forms::Button());
        this->pControlPanel = (gcnew System::Windows::Forms::Panel());
    }

```

```

        this->CurrentPageNo = (gcnew System::Windows::Forms::Label());
        this->p1BTN = (gcnew System::Windows::Forms::Button());
        this->p2BTN = (gcnew System::Windows::Forms::Button());
        this->mstatus = (gcnew System::Windows::Forms::StatusStrip());
        this->saying = (gcnew
System::Windows::Forms::ToolStripStatusLabel());
        this->caps = (gcnew System::Windows::Forms::ToolStripStatusLabel());
        this->num = (gcnew System::Windows::Forms::ToolStripStatusLabel());
        this->dayt = (gcnew System::Windows::Forms::ToolStripStatusLabel());
        this->mmenu = (gcnew System::Windows::Forms::MenuStrip());
        this->fileToolStripMenuItem = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->exitToolStripMenuItem = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->viewToolStripMenuItem = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem4 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem5 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem9 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem6 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem7 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem12 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem13 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem14 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem15 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem16 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem2 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem17 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->toolStripMenuItem18 = (gcnew
System::Windows::Forms::ToolStripMenuItem());
        this->friendChat = (gcnew System::Windows::Forms::Button());
        this->toolbar1 = (gcnew System::Windows::Forms::Panel());
        this->completeP = (gcnew System::Windows::Forms::Label());
        this->examF = (gcnew System::Windows::Forms::Label());
        this->examP = (gcnew System::Windows::Forms::Label());
        this->btnExam = (gcnew System::Windows::Forms::Button());
        this->btnFriendsProgress = (gcnew System::Windows::Forms::Button());
        this->btnFriends = (gcnew System::Windows::Forms::Button());
        this->btnMyProfile = (gcnew System::Windows::Forms::Button());
        this->ttip = (gcnew System::Windows::Forms::ToolTip(this-
>components));
        this->calCu = (gcnew System::Windows::Forms::Button());
        this->Personalize = (gcnew System::Windows::Forms::Button());
        this->toolbar2 = (gcnew System::Windows::Forms::Panel());
        this->dyn = (gcnew System::Windows::Forms::Timer(this->components));
        this->lessonContainer->SuspendLayout();

```

```

    this->container_p1->SuspendLayout();
    this->container_p2->SuspendLayout();
    this->pControlPanel->SuspendLayout();
    this->mstatus->SuspendLayout();
    this->mmenu->SuspendLayout();
    this->toolbar1->SuspendLayout();
    this->toolbar2->SuspendLayout();
    this->SuspendLayout();
    //
    // lessonContainer
    //
    this->lessonContainer->BackColor =
System::Drawing::Color::Transparent;
    this->lessonContainer->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"lessonContainer.BackgroundImage")));
    this->lessonContainer->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->lessonContainer->Controls->Add(this->container_p1);
    this->lessonContainer->Controls->Add(this->container_p2);
    this->lessonContainer->Controls->Add(this->pControlPanel);
    this->lessonContainer->Location = System::Drawing::Point(3, 175);
    this->lessonContainer->Name = L"lessonContainer";
    this->lessonContainer->Size = System::Drawing::Size(543, 499);
    this->lessonContainer->TabIndex = 266;
    //
    // container_p1
    //
    this->container_p1->Controls->Add(this->label1);
    this->container_p1->Controls->Add(this->p1_17);
    this->container_p1->Controls->Add(this->p1_22);
    this->container_p1->Controls->Add(this->p1_7);
    this->container_p1->Controls->Add(this->p1_2);
    this->container_p1->Controls->Add(this->p1_5);
    this->container_p1->Controls->Add(this->p1_4);
    this->container_p1->Controls->Add(this->p1_3);
    this->container_p1->Controls->Add(this->p1_8);
    this->container_p1->Controls->Add(this->p1_12);
    this->container_p1->Controls->Add(this->p1_21);
    this->container_p1->Controls->Add(this->p1_16);
    this->container_p1->Controls->Add(this->p1_15);
    this->container_p1->Controls->Add(this->p1_14);
    this->container_p1->Controls->Add(this->p1_13);
    this->container_p1->Controls->Add(this->p1_11);
    this->container_p1->Controls->Add(this->p1_25);
    this->container_p1->Controls->Add(this->p1_24);
    this->container_p1->Controls->Add(this->p1_23);
    this->container_p1->Controls->Add(this->p1_20);
    this->container_p1->Controls->Add(this->p1_19);
    this->container_p1->Controls->Add(this->p1_18);
    this->container_p1->Controls->Add(this->p1_1);
    this->container_p1->Controls->Add(this->p1_10);
    this->container_p1->Controls->Add(this->p1_9);
    this->container_p1->Controls->Add(this->p1_6);
    this->container_p1->Location = System::Drawing::Point(11, 3);
    this->container_p1->Name = L"container_p1";
    this->container_p1->Size = System::Drawing::Size(49, 61);
    this->container_p1->TabIndex = 282;

```

```

    this->container_p1->Visible = false;
    //
    // label1
    //
    this->label1->BackColor = System::Drawing::Color::Gold;
    this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label1->ForeColor = System::Drawing::Color::Black;
    this->label1->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"label1.Image")));
    this->label1->Location = System::Drawing::Point(0, 0);
    this->label1->Name = L"label1";
    this->label1->Size = System::Drawing::Size(520, 24);
    this->label1->TabIndex = 307;
    this->label1->Text = L"Lesson List 1";
    this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // p1_17
    //
    this->p1_17->BackColor = System::Drawing::Color::Transparent;
    this->p1_17->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_17->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_17->FlatAppearance->BorderSize = 0;
    this->p1_17->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_17->ForeColor = System::Drawing::Color::White;
    this->p1_17->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_17.Image")));
    this->p1_17->Location = System::Drawing::Point(104, 260);
    this->p1_17->Name = L"p1_17";
    this->p1_17->Size = System::Drawing::Size(103, 78);
    this->p1_17->TabIndex = 298;
    this->p1_17->UseVisualStyleBackColor = false;
    //
    // p1_22
    //
    this->p1_22->BackColor = System::Drawing::Color::Transparent;
    this->p1_22->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_22->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_22->FlatAppearance->BorderSize = 0;
    this->p1_22->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_22->ForeColor = System::Drawing::Color::White;
    this->p1_22->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_22.Image")));
    this->p1_22->Location = System::Drawing::Point(104, 338);
    this->p1_22->Name = L"p1_22";
    this->p1_22->Size = System::Drawing::Size(103, 78);
    this->p1_22->TabIndex = 303;
    this->p1_22->UseVisualStyleBackColor = false;
    //
    // p1_7
    //
    this->p1_7->BackColor = System::Drawing::Color::Transparent;
    this->p1_7->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;

```

```

this->p1_7->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_7->FlatAppearance->BorderSize = 0;
this->p1_7->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_7->ForeColor = System::Drawing::Color::White;
this->p1_7->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_7.Image")));
this->p1_7->Location = System::Drawing::Point(104, 104);
this->p1_7->Name = L"p1_7";
this->p1_7->Size = System::Drawing::Size(103, 78);
this->p1_7->TabIndex = 288;
this->p1_7->UseVisualStyleBackColor = false;
//
// p1_2
//
this->p1_2->BackColor = System::Drawing::Color::Transparent;
this->p1_2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_2->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_2->FlatAppearance->BorderSize = 0;
this->p1_2->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_2->ForeColor = System::Drawing::Color::White;
this->p1_2->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_2.Image")));
this->p1_2->Location = System::Drawing::Point(104, 26);
this->p1_2->Name = L"p1_2";
this->p1_2->Size = System::Drawing::Size(103, 78);
this->p1_2->TabIndex = 283;
this->p1_2->UseVisualStyleBackColor = false;
//
// p1_5
//
this->p1_5->BackColor = System::Drawing::Color::Transparent;
this->p1_5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_5->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_5->FlatAppearance->BorderSize = 0;
this->p1_5->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_5->ForeColor = System::Drawing::Color::White;
this->p1_5->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_5.Image")));
this->p1_5->Location = System::Drawing::Point(415, 25);
this->p1_5->Name = L"p1_5";
this->p1_5->Size = System::Drawing::Size(103, 78);
this->p1_5->TabIndex = 286;
this->p1_5->UseVisualStyleBackColor = false;
//
// p1_4
//
this->p1_4->BackColor = System::Drawing::Color::Transparent;
this->p1_4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_4->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_4->FlatAppearance->BorderSize = 0;
this->p1_4->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_4->ForeColor = System::Drawing::Color::White;
this->p1_4->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_4.Image")));
this->p1_4->Location = System::Drawing::Point(311, 24);

```

```

this->p1_4->Name = L"p1_4";
this->p1_4->Size = System::Drawing::Size(103, 78);
this->p1_4->TabIndex = 285;
this->p1_4->UseVisualStyleBackColor = false;
//
// p1_3
//
this->p1_3->BackColor = System::Drawing::Color::Transparent;
this->p1_3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_3->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_3->FlatAppearance->BorderSize = 0;
this->p1_3->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_3->ForeColor = System::Drawing::Color::White;
this->p1_3->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_3.Image")));
this->p1_3->Location = System::Drawing::Point(207, 25);
this->p1_3->Name = L"p1_3";
this->p1_3->Size = System::Drawing::Size(103, 78);
this->p1_3->TabIndex = 284;
this->p1_3->UseVisualStyleBackColor = false;
//
// p1_8
//
this->p1_8->BackColor = System::Drawing::Color::Transparent;
this->p1_8->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_8->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_8->FlatAppearance->BorderSize = 0;
this->p1_8->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_8->ForeColor = System::Drawing::Color::White;
this->p1_8->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_8.Image")));
this->p1_8->Location = System::Drawing::Point(207, 103);
this->p1_8->Name = L"p1_8";
this->p1_8->Size = System::Drawing::Size(103, 78);
this->p1_8->TabIndex = 289;
this->p1_8->UseVisualStyleBackColor = false;
//
// p1_12
//
this->p1_12->BackColor = System::Drawing::Color::Transparent;
this->p1_12->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_12->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_12->FlatAppearance->BorderSize = 0;
this->p1_12->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_12->ForeColor = System::Drawing::Color::White;
this->p1_12->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_12.Image")));
this->p1_12->Location = System::Drawing::Point(104, 182);
this->p1_12->Name = L"p1_12";
this->p1_12->Size = System::Drawing::Size(103, 78);
this->p1_12->TabIndex = 293;
this->p1_12->UseVisualStyleBackColor = false;
//
// p1_21
//

```

```

        this->p1_21->BackColor = System::Drawing::Color::Transparent;
        this->p1_21->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_21->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_21->FlatAppearance->BorderSize = 0;
        this->p1_21->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_21->ForeColor = System::Drawing::Color::White;
        this->p1_21->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_21.Image")));
        this->p1_21->Location = System::Drawing::Point(0, 338);
        this->p1_21->Name = L"p1_21";
        this->p1_21->Size = System::Drawing::Size(103, 78);
        this->p1_21->TabIndex = 302;
        this->p1_21->UseVisualStyleBackColor = false;
//
// p1_16
//
        this->p1_16->BackColor = System::Drawing::Color::Transparent;
        this->p1_16->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_16->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_16->FlatAppearance->BorderSize = 0;
        this->p1_16->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_16->ForeColor = System::Drawing::Color::White;
        this->p1_16->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_16.Image")));
        this->p1_16->Location = System::Drawing::Point(0, 260);
        this->p1_16->Name = L"p1_16";
        this->p1_16->Size = System::Drawing::Size(103, 78);
        this->p1_16->TabIndex = 297;
        this->p1_16->UseVisualStyleBackColor = false;
//
// p1_15
//
        this->p1_15->BackColor = System::Drawing::Color::Transparent;
        this->p1_15->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_15->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_15->FlatAppearance->BorderSize = 0;
        this->p1_15->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_15->ForeColor = System::Drawing::Color::White;
        this->p1_15->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_15.Image")));
        this->p1_15->Location = System::Drawing::Point(415, 181);
        this->p1_15->Name = L"p1_15";
        this->p1_15->Size = System::Drawing::Size(103, 78);
        this->p1_15->TabIndex = 296;
        this->p1_15->UseVisualStyleBackColor = false;
//
// p1_14
//
        this->p1_14->BackColor = System::Drawing::Color::Transparent;
        this->p1_14->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_14->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_14->FlatAppearance->BorderSize = 0;
        this->p1_14->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_14->ForeColor = System::Drawing::Color::White;

```

```

        this->p1_14->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_14.Image")));
        this->p1_14->Location = System::Drawing::Point(311, 180);
        this->p1_14->Name = L"p1_14";
        this->p1_14->Size = System::Drawing::Size(103, 78);
        this->p1_14->TabIndex = 295;
        this->p1_14->UseVisualStyleBackColor = false;
    //
    // p1_13
    //
    this->p1_13->BackColor = System::Drawing::Color::Transparent;
    this->p1_13->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_13->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_13->FlatAppearance->BorderSize = 0;
    this->p1_13->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_13->ForeColor = System::Drawing::Color::White;
    this->p1_13->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_13.Image")));
    this->p1_13->Location = System::Drawing::Point(207, 181);
    this->p1_13->Name = L"p1_13";
    this->p1_13->Size = System::Drawing::Size(103, 78);
    this->p1_13->TabIndex = 294;
    this->p1_13->UseVisualStyleBackColor = false;
//
// p1_11
//
this->p1_11->BackColor = System::Drawing::Color::Transparent;
this->p1_11->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_11->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_11->FlatAppearance->BorderSize = 0;
    this->p1_11->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_11->ForeColor = System::Drawing::Color::White;
    this->p1_11->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_11.Image")));
    this->p1_11->Location = System::Drawing::Point(0, 182);
    this->p1_11->Name = L"p1_11";
    this->p1_11->Size = System::Drawing::Size(103, 78);
    this->p1_11->TabIndex = 292;
    this->p1_11->UseVisualStyleBackColor = false;
//
// p1_25
//
this->p1_25->BackColor = System::Drawing::Color::Transparent;
this->p1_25->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_25->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_25->FlatAppearance->BorderSize = 0;
    this->p1_25->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_25->ForeColor = System::Drawing::Color::White;
    this->p1_25->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_25.Image")));
    this->p1_25->Location = System::Drawing::Point(415, 337);
    this->p1_25->Name = L"p1_25";
    this->p1_25->Size = System::Drawing::Size(103, 78);
    this->p1_25->TabIndex = 306;
    this->p1_25->UseVisualStyleBackColor = false;

```

```

//  

// p1_24  

//  

this->p1_24->BackColor = System::Drawing::Color::Transparent;  

this->p1_24->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_24->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_24->FlatAppearance->BorderSize = 0;  

this->p1_24->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_24->ForeColor = System::Drawing::Color::White;  

this->p1_24->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_24.Image")));  

this->p1_24->Location = System::Drawing::Point(311, 336);  

this->p1_24->Name = L"p1_24";  

this->p1_24->Size = System::Drawing::Size(103, 78);  

this->p1_24->TabIndex = 305;  

this->p1_24->UseVisualStyleBackColor = false;  

//  

// p1_23  

//  

this->p1_23->BackColor = System::Drawing::Color::Transparent;  

this->p1_23->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_23->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_23->FlatAppearance->BorderSize = 0;  

this->p1_23->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_23->ForeColor = System::Drawing::Color::White;  

this->p1_23->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_23.Image")));  

this->p1_23->Location = System::Drawing::Point(207, 337);  

this->p1_23->Name = L"p1_23";  

this->p1_23->Size = System::Drawing::Size(103, 78);  

this->p1_23->TabIndex = 304;  

this->p1_23->UseVisualStyleBackColor = false;  

//  

// p1_20  

//  

this->p1_20->BackColor = System::Drawing::Color::Transparent;  

this->p1_20->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_20->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_20->FlatAppearance->BorderSize = 0;  

this->p1_20->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_20->ForeColor = System::Drawing::Color::White;  

this->p1_20->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_20.Image")));  

this->p1_20->Location = System::Drawing::Point(415, 259);  

this->p1_20->Name = L"p1_20";  

this->p1_20->Size = System::Drawing::Size(103, 78);  

this->p1_20->TabIndex = 301;  

this->p1_20->UseVisualStyleBackColor = false;  

//  

// p1_19  

//  

this->p1_19->BackColor = System::Drawing::Color::Transparent;  

this->p1_19->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_19->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

    this->p1_19->FlatAppearance->BorderSize = 0;
    this->p1_19->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_19->ForeColor = System::Drawing::Color::White;
    this->p1_19->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_19.Image")));
    this->p1_19->Location = System::Drawing::Point(311, 258);
    this->p1_19->Name = L"p1_19";
    this->p1_19->Size = System::Drawing::Size(103, 78);
    this->p1_19->TabIndex = 300;
    this->p1_19->UseVisualStyleBackColor = false;
    //
    // p1_18
    //
    this->p1_18->BackColor = System::Drawing::Color::Transparent;
    this->p1_18->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_18->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_18->FlatAppearance->BorderSize = 0;
    this->p1_18->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_18->ForeColor = System::Drawing::Color::White;
    this->p1_18->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_18.Image")));
    this->p1_18->Location = System::Drawing::Point(207, 259);
    this->p1_18->Name = L"p1_18";
    this->p1_18->Size = System::Drawing::Size(103, 78);
    this->p1_18->TabIndex = 299;
    this->p1_18->UseVisualStyleBackColor = false;
    //
    // p1_1
    //
    this->p1_1->BackColor = System::Drawing::Color::Transparent;
    this->p1_1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_1->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_1->FlatAppearance->BorderSize = 0;
    this->p1_1->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_1->ForeColor = System::Drawing::Color::White;
    this->p1_1->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_1.Image")));
    this->p1_1->Location = System::Drawing::Point(0, 26);
    this->p1_1->Name = L"p1_1";
    this->p1_1->Size = System::Drawing::Size(103, 78);
    this->p1_1->TabIndex = 282;
    this->p1_1->UseVisualStyleBackColor = false;
    //
    // p1_10
    //
    this->p1_10->BackColor = System::Drawing::Color::Transparent;
    this->p1_10->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_10->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_10->FlatAppearance->BorderSize = 0;
    this->p1_10->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_10->ForeColor = System::Drawing::Color::White;
    this->p1_10->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_10.Image")));
    this->p1_10->Location = System::Drawing::Point(415, 103);
    this->p1_10->Name = L"p1_10";

```

```

    this->p1_10->Size = System::Drawing::Size(103, 78);
    this->p1_10->TabIndex = 291;
    this->p1_10->UseVisualStyleBackColor = false;
    //
    // p1_9
    //
    this->p1_9->BackColor = System::Drawing::Color::Transparent;
    this->p1_9->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_9->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_9->FlatAppearance->BorderSize = 0;
    this->p1_9->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_9->ForeColor = System::Drawing::Color::White;
    this->p1_9->Image = (cli::safe_cast<System::Drawing::Image^
(resources->GetObject(L"p1_9.Image")));
    this->p1_9->Location = System::Drawing::Point(311, 102);
    this->p1_9->Name = L"p1_9";
    this->p1_9->Size = System::Drawing::Size(103, 78);
    this->p1_9->TabIndex = 290;
    this->p1_9->UseVisualStyleBackColor = false;
    //
    // p1_6
    //
    this->p1_6->BackColor = System::Drawing::Color::Transparent;
    this->p1_6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_6->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_6->FlatAppearance->BorderSize = 0;
    this->p1_6->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_6->ForeColor = System::Drawing::Color::White;
    this->p1_6->Image = (cli::safe_cast<System::Drawing::Image^
(resources->GetObject(L"p1_6.Image")));
    this->p1_6->Location = System::Drawing::Point(0, 104);
    this->p1_6->Name = L"p1_6";
    this->p1_6->Size = System::Drawing::Size(103, 78);
    this->p1_6->TabIndex = 287;
    this->p1_6->UseVisualStyleBackColor = false;
    //
    // container_p2
    //
    this->container_p2->Controls->Add(this->label12);
    this->container_p2->Controls->Add(this->button1);
    this->container_p2->Controls->Add(this->button3);
    this->container_p2->Controls->Add(this->button4);
    this->container_p2->Controls->Add(this->button5);
    this->container_p2->Controls->Add(this->button6);
    this->container_p2->Controls->Add(this->button7);
    this->container_p2->Controls->Add(this->button8);
    this->container_p2->Controls->Add(this->button9);
    this->container_p2->Controls->Add(this->button11);
    this->container_p2->Controls->Add(this->button12);
    this->container_p2->Controls->Add(this->button13);
    this->container_p2->Controls->Add(this->button14);
    this->container_p2->Controls->Add(this->button15);
    this->container_p2->Controls->Add(this->button22);
    this->container_p2->Controls->Add(this->button23);
    this->container_p2->Controls->Add(this->button24);
    this->container_p2->Controls->Add(this->button25);

```

```

        this->container_p2->Location = System::Drawing::Point(8, 3);
        this->container_p2->Name = L"container_p2";
        this->container_p2->Size = System::Drawing::Size(520, 385);
        this->container_p2->TabIndex = 283;
        //
        // label2
        //
        this->label2->BackColor = System::Drawing::Color::Black;
        this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                     static_cast<System::Byte>(0)));
        this->label2->ForeColor = System::Drawing::Color::Black;
        this->label2->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"label2.Image")));
        this->label2->Location = System::Drawing::Point(0, 0);
        this->label2->Name = L"label2";
        this->label2->Size = System::Drawing::Size(520, 24);
        this->label2->TabIndex = 307;
        this->label2->Text = L"Lesson List 2";
        this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // button1
        //
        this->button1->BackColor = System::Drawing::Color::Transparent;
        this->button1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button1->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button1->FlatAppearance->BorderSize = 0;
        this->button1->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button1->ForeColor = System::Drawing::Color::White;
        this->button1->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button1.Image")));
        this->button1->Location = System::Drawing::Point(263, 265);
        this->button1->Name = L"button1";
        this->button1->Size = System::Drawing::Size(103, 78);
        this->button1->TabIndex = 298;
        this->button1->UseVisualStyleBackColor = false;
        //
        // button3
        //
        this->button3->BackColor = System::Drawing::Color::Transparent;
        this->button3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button3->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button3->FlatAppearance->BorderSize = 0;
        this->button3->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button3->ForeColor = System::Drawing::Color::White;
        this->button3->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button3.Image")));
        this->button3->Location = System::Drawing::Point(104, 104);
        this->button3->Name = L"button3";
        this->button3->Size = System::Drawing::Size(103, 78);
        this->button3->TabIndex = 288;
        this->button3->UseVisualStyleBackColor = false;
        //
        // button4
        //

```

```

        this->button4->BackColor = System::Drawing::Color::Transparent;
        this->button4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button4->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button4->FlatAppearance->BorderSize = 0;
        this->button4->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button4->ForeColor = System::Drawing::Color::White;
        this->button4->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button4.Image")));
        this->button4->Location = System::Drawing::Point(104, 26);
        this->button4->Name = L"button4";
        this->button4->Size = System::Drawing::Size(103, 78);
        this->button4->TabIndex = 283;
        this->button4->UseVisualStyleBackColor = false;
        this->button4->Click += gcnew System::EventHandler(this,
&baseF::button4_Click);
        //
        // button5
        //
        this->button5->BackColor = System::Drawing::Color::Transparent;
        this->button5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button5->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button5->FlatAppearance->BorderSize = 0;
        this->button5->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button5->ForeColor = System::Drawing::Color::White;
        this->button5->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button5.Image")));
        this->button5->Location = System::Drawing::Point(415, 25);
        this->button5->Name = L"button5";
        this->button5->Size = System::Drawing::Size(103, 78);
        this->button5->TabIndex = 286;
        this->button5->UseVisualStyleBackColor = false;
        //
        // button6
        //
        this->button6->BackColor = System::Drawing::Color::Transparent;
        this->button6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button6->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button6->FlatAppearance->BorderSize = 0;
        this->button6->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button6->ForeColor = System::Drawing::Color::White;
        this->button6->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button6.Image")));
        this->button6->Location = System::Drawing::Point(311, 24);
        this->button6->Name = L"button6";
        this->button6->Size = System::Drawing::Size(103, 78);
        this->button6->TabIndex = 285;
        this->button6->UseVisualStyleBackColor = false;
        //
        // button7
        //
        this->button7->BackColor = System::Drawing::Color::Transparent;
        this->button7->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button7->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button7->FlatAppearance->BorderSize = 0;

```

```

        this->button7->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button7->ForeColor = System::Drawing::Color::White;
        this->button7->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button7.Image")));
        this->button7->Location = System::Drawing::Point(207, 25);
        this->button7->Name = L"button7";
        this->button7->Size = System::Drawing::Size(103, 78);
        this->button7->TabIndex = 284;
        this->button7->UseVisualStyleBackColor = false;
        //
        // button8
        //
        this->button8->BackColor = System::Drawing::Color::Transparent;
        this->button8->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button8->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button8->FlatAppearance->BorderSize = 0;
        this->button8->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button8->ForeColor = System::Drawing::Color::White;
        this->button8->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button8.Image")));
        this->button8->Location = System::Drawing::Point(207, 103);
        this->button8->Name = L"button8";
        this->button8->Size = System::Drawing::Size(103, 78);
        this->button8->TabIndex = 289;
        this->button8->UseVisualStyleBackColor = false;
        //
        // button9
        //
        this->button9->BackColor = System::Drawing::Color::Transparent;
        this->button9->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button9->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button9->FlatAppearance->BorderSize = 0;
        this->button9->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button9->ForeColor = System::Drawing::Color::White;
        this->button9->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button9.Image")));
        this->button9->Location = System::Drawing::Point(104, 182);
        this->button9->Name = L"button9";
        this->button9->Size = System::Drawing::Size(103, 78);
        this->button9->TabIndex = 293;
        this->button9->UseVisualStyleBackColor = false;
        //
        // button11
        //
        this->button11->BackColor = System::Drawing::Color::Transparent;
        this->button11->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button11->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button11->FlatAppearance->BorderSize = 0;
        this->button11->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button11->ForeColor = System::Drawing::Color::White;
        this->button11->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button11.Image")));
        this->button11->Location = System::Drawing::Point(159, 265);
        this->button11->Name = L"button11";
        this->button11->Size = System::Drawing::Size(103, 78);

```

```

    this->button11->TabIndex = 297;
    this->button11->UseVisualStyleBackColor = false;
    //
    // button12
    //
    this->button12->BackColor = System::Drawing::Color::Transparent;
    this->button12->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button12->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button12->FlatAppearance->BorderSize = 0;
    this->button12->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button12->ForeColor = System::Drawing::Color::White;
    this->button12->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button12.Image")));
    this->button12->Location = System::Drawing::Point(415, 181);
    this->button12->Name = L"button12";
    this->button12->Size = System::Drawing::Size(103, 78);
    this->button12->TabIndex = 296;
    this->button12->UseVisualStyleBackColor = false;
    //
    // button13
    //
    this->button13->BackColor = System::Drawing::Color::Transparent;
    this->button13->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button13->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button13->FlatAppearance->BorderSize = 0;
    this->button13->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button13->ForeColor = System::Drawing::Color::White;
    this->button13->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button13.Image")));
    this->button13->Location = System::Drawing::Point(311, 180);
    this->button13->Name = L"button13";
    this->button13->Size = System::Drawing::Size(103, 78);
    this->button13->TabIndex = 295;
    this->button13->UseVisualStyleBackColor = false;
    //
    // button14
    //
    this->button14->BackColor = System::Drawing::Color::Transparent;
    this->button14->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button14->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button14->FlatAppearance->BorderSize = 0;
    this->button14->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button14->ForeColor = System::Drawing::Color::White;
    this->button14->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button14.Image")));
    this->button14->Location = System::Drawing::Point(207, 181);
    this->button14->Name = L"button14";
    this->button14->Size = System::Drawing::Size(103, 78);
    this->button14->TabIndex = 294;
    this->button14->UseVisualStyleBackColor = false;
    //
    // button15
    //
    this->button15->BackColor = System::Drawing::Color::Transparent;

```

```

    this->button15->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button15->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button15->FlatAppearance->BorderSize = 0;
    this->button15->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button15->ForeColor = System::Drawing::Color::White;
    this->button15->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button15.Image"))));
    this->button15->Location = System::Drawing::Point(0, 182);
    this->button15->Name = L"button15";
    this->button15->Size = System::Drawing::Size(103, 78);
    this->button15->TabIndex = 292;
    this->button15->UseVisualStyleBackColor = false;
//
// button22
//
this->button22->BackColor = System::Drawing::Color::Transparent;
this->button22->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button22->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button22->FlatAppearance->BorderSize = 0;
    this->button22->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button22->ForeColor = System::Drawing::Color::White;
    this->button22->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button22.Image"))));
    this->button22->Location = System::Drawing::Point(0, 26);
    this->button22->Name = L"button22";
    this->button22->Size = System::Drawing::Size(103, 78);
    this->button22->TabIndex = 282;
    this->button22->UseVisualStyleBackColor = false;
//
// button23
//
this->button23->BackColor = System::Drawing::Color::Transparent;
this->button23->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button23->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button23->FlatAppearance->BorderSize = 0;
    this->button23->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button23->ForeColor = System::Drawing::Color::White;
    this->button23->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button23.Image"))));
    this->button23->Location = System::Drawing::Point(415, 103);
    this->button23->Name = L"button23";
    this->button23->Size = System::Drawing::Size(103, 78);
    this->button23->TabIndex = 291;
    this->button23->UseVisualStyleBackColor = false;
//
// button24
//
this->button24->BackColor = System::Drawing::Color::Transparent;
this->button24->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button24->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button24->FlatAppearance->BorderSize = 0;
    this->button24->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button24->ForeColor = System::Drawing::Color::White;

```

```

        this->button24->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button24.Image")));
        this->button24->Location = System::Drawing::Point(311, 102);
        this->button24->Name = L"button24";
        this->button24->Size = System::Drawing::Size(103, 78);
        this->button24->TabIndex = 290;
        this->button24->UseVisualStyleBackColor = false;
    //
    // button25
    //
    this->button25->BackColor = System::Drawing::Color::Transparent;
    this->button25->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button25->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button25->FlatAppearance->BorderSize = 0;
    this->button25->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button25->ForeColor = System::Drawing::Color::White;
    this->button25->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button25.Image")));
    this->button25->Location = System::Drawing::Point(0, 104);
    this->button25->Name = L"button25";
    this->button25->Size = System::Drawing::Size(103, 78);
    this->button25->TabIndex = 287;
    this->button25->UseVisualStyleBackColor = false;
//
// pControlPanel
//
this->pControlPanel->BackColor =
System::Drawing::Color::Transparent;
this->pControlPanel->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pControlPanel.BackgroundImage")));
this->pControlPanel->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Center;
this->pControlPanel->Controls->Add(this->CurrentPageNo);
this->pControlPanel->Controls->Add(this->p1BTN);
this->pControlPanel->Controls->Add(this->p2BTN);
this->pControlPanel->ForeColor = System::Drawing::Color::Black;
this->pControlPanel->Location = System::Drawing::Point(8, 439);
this->pControlPanel->Name = L"pControlPanel";
this->pControlPanel->Size = System::Drawing::Size(527, 38);
this->pControlPanel->TabIndex = 242;
//
// CurrentPageNo
//
this->CurrentPageNo->AutoSize = true;
this->CurrentPageNo->Font = (gcnew System::Drawing::Font(L"Arial",
8.25F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->CurrentPageNo->Location = System::Drawing::Point(453, 12);
this->CurrentPageNo->Name = L"CurrentPageNo";
this->CurrentPageNo->Size = System::Drawing::Size(66, 14);
this->CurrentPageNo->TabIndex = 22;
this->CurrentPageNo->Text = L"Page 1 of 2";
//
// p1BTN
//
this->p1BTN->BackColor = System::Drawing::Color::Transparent;

```

```

        this->p1BTN->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"p1BTN.BackgroundImage")));
        this->p1BTN->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p1BTN->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1BTN->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1BTN->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->p1BTN->ForeColor = System::Drawing::Color::White;
        this->p1BTN->Location = System::Drawing::Point(185, 7);
        this->p1BTN->Name = L"p1BTN";
        this->p1BTN->Size = System::Drawing::Size(76, 23);
        this->p1BTN->TabIndex = 1;
        this->p1BTN->Text = L"1";
        this->ttip->SetToolTip(this->p1BTN, L"First Set of Lessons");
        this->p1BTN->UseVisualStyleBackColor = false;
        this->p1BTN->Click += gcnew System::EventHandler(this,
&baseF::p1BTN_Click);
        //
        // p2BTN
        //
        this->p2BTN->BackColor = System::Drawing::Color::Transparent;
        this->p2BTN->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"p2BTN.BackgroundImage")));
        this->p2BTN->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p2BTN->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p2BTN->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p2BTN->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->p2BTN->ForeColor = System::Drawing::Color::White;
        this->p2BTN->Location = System::Drawing::Point(267, 7);
        this->p2BTN->Name = L"p2BTN";
        this->p2BTN->Size = System::Drawing::Size(76, 23);
        this->p2BTN->TabIndex = 2;
        this->p2BTN->Text = L"2";
        this->ttip->SetToolTip(this->p2BTN, L"Second Set of Lessons");
        this->p2BTN->UseVisualStyleBackColor = false;
        this->p2BTN->Click += gcnew System::EventHandler(this,
&baseF::p2BTN_Click);
        //
        // mstatus
        //
        this->mstatus->BackColor = System::Drawing::Color::SteelBlue;
        this->mstatus->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"mstatus.BackgroundImage")));
        this->mstatus->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->mstatus->Items->AddRange(gcnew cli::array<
System::Windows::Forms::ToolStripItem^>(4) {this->saying, this->caps,
        this->num, this->dayt});
        this->mstatus->Location = System::Drawing::Point(0, 677);

```

```

this->mstatus->Name = L"mstatus";
this->mstatus->Size = System::Drawing::Size(768, 22);
this->mstatus->SizingGrip = false;
this->mstatus->TabIndex = 267;
this->mstatus->Text = L"mstatus";
//
// saying
//
this->saying->BackColor = System::Drawing::Color::Transparent;
this->saying->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->saying->ForeColor = System::Drawing::Color::Black;
this->saying->Name = L"saying";
this->saying->RightToLeft = System::Windows::Forms::RightToLeft::No;
this->saying->Size = System::Drawing::Size(287, 17);
this->saying->Text = L"\Knowledge is the Greatest Treasure
Achievable"";

//
// caps
//
this->caps->BackColor = System::Drawing::Color::Transparent;
this->caps->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->caps->ForeColor = System::Drawing::Color::Transparent;
this->caps->Margin = System::Windows::Forms::Padding(180, 3, 0, 2);
this->caps->Name = L"caps";
this->caps->Size = System::Drawing::Size(67, 17);
this->caps->Text = L"Caps Lock";
this->caps->ToolTipText = L"Caps Lock Ststus";
//
// num
//
this->num->BackColor = System::Drawing::Color::Transparent;
this->num->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->num->ForeColor = System::Drawing::Color::Transparent;
this->num->Margin = System::Windows::Forms::Padding(10, 3, 0, 2);
this->num->Name = L"num";
this->num->Size = System::Drawing::Size(64, 17);
this->num->Text = L"Num Lock";
this->num->ToolTipText = L"Num Lock Ststus";
//
// dayt
//
this->dayt->BackColor = System::Drawing::Color::Transparent;
this->dayt->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->dayt->ForeColor = System::Drawing::Color::Black;
this->dayt->Margin = System::Windows::Forms::Padding(20, 3, 0, 2);
this->dayt->Name = L"dayt";
this->dayt->Size = System::Drawing::Size(30, 17);
this->dayt->Text = L"DAE";
this->dayt->ToolTipText = L"Date and Time";
//

```

```

// mmenu
//
this->mmenu->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"mmenu.BackgroundImage")));
    this->mmenu->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->mmenu->Items->AddRange(gcnew cli::array<
System::Windows::Forms::ToolStripItem^>(5) {this->fileToolStripMenuItem,
    this->viewToolStripMenuItem, this->toolStripMenuItem12, this-
>toolStripMenuItem15, this->toolStripMenuItem16});
    this->mmenu->Location = System::Drawing::Point(0, 0);
    this->mmenu->Name = L"mmenu";
    this->mmenu->Size = System::Drawing::Size(768, 24);
    this->mmenu->TabIndex = 268;
    this->mmenu->Text = L"menuStrip1";
//
// fileToolStripMenuItem
//
this->fileToolStripMenuItem->DropDownItems->AddRange(gcnew
cli::array< System::Windows::Forms::ToolStripItem^>(1) {this->exitToolStripMenuItem});
    this->fileToolStripMenuItem->Font = (gcnew
System::Drawing::Font(L"Arial", 9.75F, System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->fileToolStripMenuItem->ForeColor =
System::Drawing::Color::Black;
    this->fileToolStripMenuItem->Name = L"fileToolStripMenuItem";
    this->fileToolStripMenuItem->Size = System::Drawing::Size(44, 20);
    this->fileToolStripMenuItem->Text = L"File";
//
// exitToolStripMenuItem
//
this->exitToolStripMenuItem->BackColor =
System::Drawing::Color::Maroon;
    this->exitToolStripMenuItem->Font = (gcnew
System::Drawing::Font(L"Arial", 9, System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->exitToolStripMenuItem->ForeColor =
System::Drawing::Color::White;
    this->exitToolStripMenuItem->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"exitToolStripMenuItem.Image")));
    this->exitToolStripMenuItem->Name = L"exitToolStripMenuItem";
    this->exitToolStripMenuItem->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Alt |
System::Windows::Forms::Keys::Q));
    this->exitToolStripMenuItem->Size = System::Drawing::Size(134, 22);
    this->exitToolStripMenuItem->Text = L"Exit";
    this->exitToolStripMenuItem->Click += gcnew
System::EventHandler(this, &baseF::exitToolStripMenuItem_Click);
//
// viewToolStripMenuItem
//
this->viewToolStripMenuItem->DropDownItems->AddRange(gcnew
cli::array< System::Windows::Forms::ToolStripItem^>(5) {this->toolStripMenuItem4,

```

```

        this->toolStripMenuItem5, this->toolStripMenuItem9, this-
>toolStripMenuItem6, this->toolStripMenuItem7));
this->viewToolStripMenuItem->ForeColor =
System::Drawing::Color::Black;
this->viewToolStripMenuItem->Name = L"viewToolStripMenuItem";
this->viewToolStripMenuItem->Size = System::Drawing::Size(47, 20);
this->viewToolStripMenuItem->Text = L"View";
//
// toolStripMenuItem4
//
this->toolStripMenuItem4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem4.BackgroundImage")));
this->toolStripMenuItem4->Font = (gcnew
System::Drawing::Font(L"Arial", 9, System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->toolStripMenuItem4->ForeColor = System::Drawing::Color::Black;
this->toolStripMenuItem4->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem4.Image")));
this->toolStripMenuItem4->Name = L"toolStripMenuItem4";
this->toolStripMenuItem4->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Alt |
System::Windows::Forms::Keys::C));
this->toolStripMenuItem4->Size = System::Drawing::Size(187, 22);
this->toolStripMenuItem4->Text = L"Calculators";
this->toolStripMenuItem4->Click += gcnew System::EventHandler(this,
&baseF::calCu_Click);
//
// toolStripMenuItem5
//
this->toolStripMenuItem5->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem5.BackgroundImage")));
this->toolStripMenuItem5->Font = (gcnew
System::Drawing::Font(L"Arial", 9, System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->toolStripMenuItem5->ForeColor = System::Drawing::Color::Black;
this->toolStripMenuItem5->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem5.Image")));
this->toolStripMenuItem5->Name = L"toolStripMenuItem5";
this->toolStripMenuItem5->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Alt |
System::Windows::Forms::Keys::E));
this->toolStripMenuItem5->Size = System::Drawing::Size(187, 22);
this->toolStripMenuItem5->Text = L"Examinations";
this->toolStripMenuItem5->Click += gcnew System::EventHandler(this,
&baseF::btnExam_Click);
//
// toolStripMenuItem9
//
this->toolStripMenuItem9->AutoSize = false;
this->toolStripMenuItem9->BackColor = System::Drawing::Color::White;
this->toolStripMenuItem9->Name = L"toolStripMenuItem9";
this->toolStripMenuItem9->Size = System::Drawing::Size(250, 1);

```

```

        this->toolStripMenuItem9->Text = L".";
    //
    // toolStripMenuItem6
    //
    this->toolStripMenuItem6->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem6.BackgroundImage")));
    this->toolStripMenuItem6->Font = (gcnew
System::Drawing::Font(L"Arial", 9, System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->toolStripMenuItem6->ForeColor = System::Drawing::Color::Black;
    this->toolStripMenuItem6->Name = L"toolStripMenuItem6";
    this->toolStripMenuItem6->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Control |
System::Windows::Forms::Keys::E));
    this->toolStripMenuItem6->ShowShortcutKeys = false;
    this->toolStripMenuItem6->Size = System::Drawing::Size(187, 22);
    this->toolStripMenuItem6->Text = L"My Friends";
    this->toolStripMenuItem6->Click += gcnew System::EventHandler(this,
&baseF::btnFriends_Click);
    //
    // toolStripMenuItem7
    //
    this->toolStripMenuItem7->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem7.BackgroundImage")));
    this->toolStripMenuItem7->Font = (gcnew
System::Drawing::Font(L"Arial", 9, System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->toolStripMenuItem7->ForeColor = System::Drawing::Color::Black;
    this->toolStripMenuItem7->Name = L"toolStripMenuItem7";
    this->toolStripMenuItem7->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Control |
System::Windows::Forms::Keys::E));
    this->toolStripMenuItem7->ShowShortcutKeys = false;
    this->toolStripMenuItem7->Size = System::Drawing::Size(187, 22);
    this->toolStripMenuItem7->Text = L"My Friend\`s Progress";
    this->toolStripMenuItem7->Click += gcnew System::EventHandler(this,
&baseF::btnFriendsProgress_Click);
    //
    // toolStripMenuItem12
    //
    this->toolStripMenuItem12->DropDownItems->AddRange(gcnew cli::array<
System::Windows::Forms::ToolStripItem^>(2) {this->toolStripMenuItem13,
    this->toolStripMenuItem14});
    this->toolStripMenuItem12->ForeColor =
System::Drawing::Color::Black;
    this->toolStripMenuItem12->Name = L"toolStripMenuItem12";
    this->toolStripMenuItem12->Size = System::Drawing::Size(63, 20);
    this->toolStripMenuItem12->Text = L"Options";
    //
    // toolStripMenuItem13
    //
    this->toolStripMenuItem13->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem13.BackgroundImage")));

```

```

        this->toolStripMenuItem13->ForeColor =
System::Drawing::Color::Black;
        this->toolStripMenuItem13->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem13.Image")));
        this->toolStripMenuItem13->Name = L"toolStripMenuItem13";
        this->toolStripMenuItem13->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Alt |
System::Windows::Forms::Keys::C));
        this->toolStripMenuItem13->ShowShortcutKeys = false;
        this->toolStripMenuItem13->Size = System::Drawing::Size(164, 22);
        this->toolStripMenuItem13->Text = L"Personalize";
    //
    // toolStripMenuItem14
    //
        this->toolStripMenuItem14->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem14.BackgroundImage")));
        this->toolStripMenuItem14->ForeColor =
System::Drawing::Color::Black;
        this->toolStripMenuItem14->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem14.Image")));
        this->toolStripMenuItem14->Name = L"toolStripMenuItem14";
        this->toolStripMenuItem14->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Control |
System::Windows::Forms::Keys::O));
        this->toolStripMenuItem14->Size = System::Drawing::Size(164, 22);
        this->toolStripMenuItem14->Text = L"Settings";
    //
    // toolStripMenuItem15
    //
        this->toolStripMenuItem15->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem15.BackgroundImage")));
        this->toolStripMenuItem15->ForeColor =
System::Drawing::Color::Black;
        this->toolStripMenuItem15->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem15.Image")));
        this->toolStripMenuItem15->Name = L"toolStripMenuItem15";
        this->toolStripMenuItem15->ShortcutKeys =
static_cast<System::Windows::Forms::Keys>((System::Windows::Forms::Keys::Control |
System::Windows::Forms::Keys::R));
        this->toolStripMenuItem15->Size = System::Drawing::Size(136, 20);
        this->toolStripMenuItem15->Text = L"Remember these!";
        this->toolStripMenuItem15->Click += gcnew System::EventHandler(this,
&baseF::toolStripMenuItem15_Click);
    //
    // toolStripMenuItem16
    //
        this->toolStripMenuItem16->DropDownItems->AddRange(gcnew cli::array<
System::Windows::Forms::ToolStripItem^>(3) {this->toolStripMenuItem2,
            this->toolStripMenuItem17, this->toolStripMenuItem18});
        this->toolStripMenuItem16->ForeColor =
System::Drawing::Color::Black;
        this->toolStripMenuItem16->Name = L"toolStripMenuItem16";
        this->toolStripMenuItem16->Size = System::Drawing::Size(52, 20);

```

```

this->toolStripMenuItem16->Text = L"MOLE";
//
// toolStripMenuItem2
//
this->toolStripMenuItem2->AutoSize = false;
this->toolStripMenuItem2->BackColor = System::Drawing::Color::White;
this->toolStripMenuItem2->Name = L"toolStripMenuItem2";
this->toolStripMenuItem2->Size = System::Drawing::Size(250, 1);
this->toolStripMenuItem2->Text = L".";
//
// toolStripMenuItem17
//
this->toolStripMenuItem17->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem17.BackgroundImage")));
this->toolStripMenuItem17->ForeColor =
System::Drawing::Color::Black;
this->toolStripMenuItem17->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem17.Image")));
this->toolStripMenuItem17->Name = L"toolStripMenuItem17";
this->toolStripMenuItem17->ShortcutKeys =
System::Windows::Forms::Keys::F1;
this->toolStripMenuItem17->Size = System::Drawing::Size(179, 22);
this->toolStripMenuItem17->Text = L"About";
this->toolStripMenuItem17->Click += gcnew System::EventHandler(this,
&baseF::toolStripMenuItem17_Click);
//
// toolStripMenuItem18
//
this->toolStripMenuItem18->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem18.BackgroundImage")));
this->toolStripMenuItem18->ForeColor =
System::Drawing::Color::Black;
this->toolStripMenuItem18->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolStripMenuItem18.Image")));
this->toolStripMenuItem18->Name = L"toolStripMenuItem18";
this->toolStripMenuItem18->Size = System::Drawing::Size(179, 22);
this->toolStripMenuItem18->Text = L"Check for Updates";
//
// friendChat
//
this->friendChat->BackColor = System::Drawing::Color::Transparent;
this->friendChat->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->friendChat->Cursor = System::Windows::Forms::Cursors::Hand;
this->friendChat->FlatAppearance->BorderSize = 0;
this->friendChat->FlatStyle =
System::Windows::Forms::FlatStyle::Flat;
this->friendChat->ForeColor = System::Drawing::Color::White;
this->friendChat->Image = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"friendChat.Image")));
this->friendChat->Location = System::Drawing::Point(-1, 33);
this->friendChat->Name = L"friendChat";
this->friendChat->Size = System::Drawing::Size(225, 48);
this->friendChat->TabIndex = 11;

```

```

        this->ttip->SetToolTip(this->friendChat, L"Chat with one of your
MOLE friends");
        this->friendChat->UseVisualStyleBackColor = false;
        //
        // toolbar1
        //
        this->toolbar1->BackColor = System::Drawing::Color::Transparent;
        this->toolbar1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolbar1.BackgroundImage")));
        this->toolbar1->Controls->Add(this->completeP);
        this->toolbar1->Controls->Add(this->examF);
        this->toolbar1->Controls->Add(this->examP);
        this->toolbar1->Controls->Add(this->btnExam);
        this->toolbar1->Controls->Add(this->btnFriendsProgress);
        this->toolbar1->Controls->Add(this->btnFriends);
        this->toolbar1->Controls->Add(this->btnMyProfile);
        this->toolbar1->Location = System::Drawing::Point(-2, 25);
        this->toolbar1->Name = L"toolbar1";
        this->toolbar1->Size = System::Drawing::Size(772, 150);
        this->toolbar1->TabIndex = 264;
        //
        // completeP
        //
        this->completeP->Font = (gcnew System::Drawing::Font(L"Arial", 18,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->completeP->ForeColor = System::Drawing::Color::Black;
        this->completeP->Location = System::Drawing::Point(674, 102);
        this->completeP->Name = L"completeP";
        this->completeP->Size = System::Drawing::Size(89, 25);
        this->completeP->TabIndex = 260;
        this->completeP->Text = L"10%";
        this->ttip->SetToolTip(this->completeP, L"Completed Examination
Progress");
        //
        // examF
        //
        this->examF->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->examF->ForeColor = System::Drawing::Color::Black;
        this->examF->Location = System::Drawing::Point(659, 65);
        this->examF->Name = L"examF";
        this->examF->Size = System::Drawing::Size(89, 18);
        this->examF->TabIndex = 259;
        this->examF->Text = L"3";
        this->ttip->SetToolTip(this->examF, L"Failed Examinations");
        //
        // examP
        //
        this->examP->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->examP->ForeColor = System::Drawing::Color::Black;
        this->examP->Location = System::Drawing::Point(666, 36);
        this->examP->Name = L"examP";
        this->examP->Size = System::Drawing::Size(89, 18);

```

```

        this->examP->TabIndex = 258;
        this->examP->Text = L"11";
        this->ttip->SetToolTip(this->examP, L"Passed Examinations");
    //
    // btnExam
    //
    this->btnExam->BackColor = System::Drawing::Color::Transparent;
    this->btnExam->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->btnExam->Cursor = System::Windows::Forms::Cursors::Hand;
        this->btnExam->FlatAppearance->BorderSize = 0;
        this->btnExam->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->btnExam->ForeColor = System::Drawing::Color::White;
        this->btnExam->Image = (cli::safe_cast<System::Drawing::Image^
(resources->GetObject(L"btnExam.Image")));
        this->btnExam->Location = System::Drawing::Point(402, 28);
        this->btnExam->Name = L"btnExam";
        this->btnExam->Size = System::Drawing::Size(114, 100);
        this->btnExam->TabIndex = 9;
        this->ttip->SetToolTip(this->btnExam, L"Contains examinations and
results of the examinations I have done");
        this->btnExam->UseVisualStyleBackColor = false;
        this->btnExam->Click += gcnew System::EventHandler(this,
&baseF::btnExam_Click);
    //
    // btnFriendsProgress
    //
    this->btnFriendsProgress->BackColor =
System::Drawing::Color::Transparent;
    this->btnFriendsProgress->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->btnFriendsProgress->Cursor =
System::Windows::Forms::Cursors::Hand;
        this->btnFriendsProgress->FlatAppearance->BorderSize = 0;
        this->btnFriendsProgress->FlatStyle =
System::Windows::Forms::FlatStyle::Flat;
        this->btnFriendsProgress->ForeColor = System::Drawing::Color::White;
        this->btnFriendsProgress->Image =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"btnFriendsProgress.Image")));
        this->btnFriendsProgress->Location = System::Drawing::Point(278,
28);
        this->btnFriendsProgress->Name = L"btnFriendsProgress";
        this->btnFriendsProgress->Size = System::Drawing::Size(114, 100);
        this->btnFriendsProgress->TabIndex = 8;
        this->ttip->SetToolTip(this->btnFriendsProgress, L"Contains my
friends examination progress");
        this->btnFriendsProgress->UseVisualStyleBackColor = false;
        this->btnFriendsProgress->Click += gcnew System::EventHandler(this,
&baseF::btnFriendsProgress_Click);
    //
    // btnFriends
    //
    this->btnFriends->BackColor = System::Drawing::Color::Transparent;
    this->btnFriends->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->btnFriends->Cursor = System::Windows::Forms::Cursors::Hand;
        this->btnFriends->FlatAppearance->BorderSize = 0;

```

```

        this->btnFriends->FlatStyle =
System::Windows::Forms::FlatStyle::Flat;
        this->btnFriends->ForeColor = System::Drawing::Color::White;
        this->btnFriends->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"btnFriends.Image")));
        this->btnFriends->Location = System::Drawing::Point(155, 28);
        this->btnFriends->Name = L"btnFriends";
        this->btnFriends->Size = System::Drawing::Size(114, 100);
        this->btnFriends->TabIndex = 7;
        this->ttip->SetToolTip(this->btnFriends, L"Contains details of my
MOLE friends");
        this->btnFriends->UseVisualStyleBackColor = false;
        this->btnFriends->Click += gcnew System::EventHandler(this,
&baseF::btnFriends_Click);
        //
        // btnMyProfile
        //
        this->btnMyProfile->BackColor = System::Drawing::Color::Transparent;
        this->btnMyProfile->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->btnMyProfile->Cursor = System::Windows::Forms::Cursors::Hand;
        this->btnMyProfile->FlatAppearance->BorderSize = 0;
        this->btnMyProfile->FlatStyle =
System::Windows::Forms::FlatStyle::Flat;
        this->btnMyProfile->ForeColor = System::Drawing::Color::White;
        this->btnMyProfile->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"btnMyProfile.Image")));
        this->btnMyProfile->Location = System::Drawing::Point(32, 28);
        this->btnMyProfile->Name = L"btnMyProfile";
        this->btnMyProfile->Size = System::Drawing::Size(114, 100);
        this->btnMyProfile->TabIndex = 6;
        this->ttip->SetToolTip(this->btnMyProfile, L"Contains my personal
information");
        this->btnMyProfile->UseVisualStyleBackColor = false;
        this->btnMyProfile->Click += gcnew System::EventHandler(this,
&baseF::btnMyProfile_Click);
        //
        // ttip
        //
        this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
        this->ttip->ForeColor = System::Drawing::Color::White;
        this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
        this->ttip->ToolTipTitle = L"MOLE Advisor";
        //
        // calCu
        //
        this->calCu->BackColor = System::Drawing::Color::Transparent;
        this->calCu->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->calCu->Cursor = System::Windows::Forms::Cursors::Hand;
        this->calCu->FlatAppearance->BorderSize = 0;
        this->calCu->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->calCu->ForeColor = System::Drawing::Color::White;
        this->calCu->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"calCu.Image")));
        this->calCu->Location = System::Drawing::Point(-1, 129);
        this->calCu->Name = L"calCu";
        this->calCu->Size = System::Drawing::Size(225, 48);

```

```

        this->calCu->TabIndex = 10;
        this->ttip->SetToolTip(this->calCu, L"Calculators what you don't
know");
        this->calCu->UseVisualStyleBackColor = false;
        this->calCu->Click += gcnew System::EventHandler(this,
&baseF::calCu_Click);
        //
        // Personalize
        //
        this->Personalize->BackColor = System::Drawing::Color::Transparent;
        this->Personalize->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->Personalize->Cursor = System::Windows::Forms::Cursors::Hand;
        this->Personalize->FlatAppearance->BorderSize = 0;
        this->Personalize->FlatStyle =
System::Windows::Forms::FlatStyle::Flat;
        this->Personalize->ForeColor = System::Drawing::Color::White;
        this->Personalize->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"Personalize.Image")));
        this->Personalize->Location = System::Drawing::Point(-1, 81);
        this->Personalize->Name = L"Personalize";
        this->Personalize->Size = System::Drawing::Size(225, 48);
        this->Personalize->TabIndex = 12;
        this->ttip->SetToolTip(this->Personalize, L"Personalize MOLE
Graphical User Interface");
        this->Personalize->UseVisualStyleBackColor = false;
        //
        // toolbar2
        //
        this->toolbar2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"toolbar2.BackgroundImage")));
        this->toolbar2->Controls->Add(this->calCu);
        this->toolbar2->Controls->Add(this->Personalize);
        this->toolbar2->Controls->Add(this->friendChat);
        this->toolbar2->Location = System::Drawing::Point(545, 176);
        this->toolbar2->Name = L"toolbar2";
        this->toolbar2->Size = System::Drawing::Size(225, 178);
        this->toolbar2->TabIndex = 265;
        //
        // dyn
        //
        this->dyn->Tick += gcnew System::EventHandler(this,
&baseF::dyn_Tick);
        //
        // baseF
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoScaleMode = System::Windows::Forms::AutoScaleMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->ClientSize = System::Drawing::Size(768, 699);
        this->Controls->Add(this->lessonContainer);
        this->Controls->Add(this->mstatus);
        this->Controls->Add(this->mmenu);
        this->Controls->Add(this->toolbar1);

```

```

        this->Controls->Add(this->toolbar2);
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
        this->Icon = (cli::safe_cast<System::Drawing::Icon^>(resources-
>GetObject(L"$this.Icon")));
        this->Name = L"baseF";
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"Mathematics for Ordinary Level Examination ( MOLE )";
        this->Load += gcnew System::EventHandler(this, &baseF::baseF_Load);
        this->lessonContainer->ResumeLayout(false);
        this->container_p1->ResumeLayout(false);
        this->container_p2->ResumeLayout(false);
        this->pControlPanel->ResumeLayout(false);
        this->pControlPanel->PerformLayout();
        this->mstatus->ResumeLayout(false);
        this->mstatus->PerformLayout();
        this->mmenu->ResumeLayout(false);
        this->mmenu->PerformLayout();
        this->toolbar1->ResumeLayout(false);
        this->toolbar2->ResumeLayout(false);
        this->ResumeLayout(false);
        this->PerformLayout();

    }

#pragma endregion

private: System::Void baseF_Load(System::Object^ sender, System::EventArgs^ e) {
    showLesson();
    getData();
}

private: System::Void btnMyProfile_Click(System::Object^ sender, System::EventArgs^ e)
{
    myP p;
    p.ShowDialog();
}

private: System::Void dyn_Tick(System::Object^ sender, System::EventArgs^ e) {
    DateTime dat =DateTime::Now;
    dayt->Text=dat.ToString();
}

private: System::Void toolStripMenuItem17_Click(System::Object^ sender,
System::EventArgs^ e) {
    about a;
    a.ShowDialog();
}

private: System::Void p1BTN_Click(System::Object^ sender, System::EventArgs^ e) {
    showLesson();
}

private: System::Void p2BTN_Click(System::Object^ sender, System::EventArgs^ e) {
    this->container_p1->Visible = false;
    this->container_p2->Visible = true;
    this->container_p2->BringToFront();
    CurrentPageNo->Text="Page 2 of 2";
}

```

```

private: System::Void exitToolStripMenuItem_Click(System::Object^  sender,
System::EventArgs^  e) {
    exit(0);
}
private: System::Void toolStripMenuItem15_Click(System::Object^  sender,
System::EventArgs^  e) {
    rem r;
    r.ShowDialog();
}
private: System::Void button4_Click(System::Object^  sender, System::EventArgs^  e) {
    showL("Perimeter", 27);
}
void showL(String^ lname, int no){
    try{
        StreamWriter^ sw = gcnew StreamWriter(
Application::ExecutablePath->Replace("MOLE.exe","lStart.ms"));
        sw->WriteLine("LName = "+lname);
        sw->WriteLine("No = "+no);
        sw->Close();
        showLink(Application::ExecutablePath-
>Replace("MOLE.exe","mLessons.exe"));
        this->Close();
    }catch(Exception^ ex){
        MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
    }
}
private: System::Void calCu_Click(System::Object^  sender, System::EventArgs^  e) {
    this->Hide();
    showLink(Application::ExecutablePath-
>Replace("MOLE.exe","mCalculator.exe"));
    this->Hide();
}
private: System::Void btnFriends_Click(System::Object^  sender, System::EventArgs^  e) {
    try{
        C.doShow("D", "log.ms");
        C.doShow("D", "details.ms");
        this->Hide();
        openProfile();

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("MOLE.exe","fMOLE.exe"))->WaitForExit();
        this->Show();
        C.doShow("E", "log.ms");
        C.doShow("E", "details.ms");
    }catch(Exception^ ex){
        this->Show();
        MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
    }
}
private: System::Void btnFriendsProgress_Click(System::Object^  sender,
System::EventArgs^  e) {
    try{
        C.doShow("D", "log.ms");
        C.doShow("D", "details.ms");
        this->Hide();
        openProfile();
    }
}

```

```

        StreamWriter^ sw = gcnew StreamWriter(
Application::ExecutablePath->Replace("MOLE.exe","user\\mFriend.ms"));
        sw->WriteLine("FUser = "+userName);
        sw->WriteLine("AddU = 5");
        sw->Close();

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("MOLE.exe","mFriend.jar"))->WaitForExit();

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("MOLE.exe","mfriendP.exe"))->WaitForExit();
            this->Show();
            C.doShow("E", "log.ms");
            C.doShow("E", "details.ms");
        }catch(Exception^ ex){
            this->Show();
            MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
        }
    }
    void openProfile(){
        StreamWriter^ sw = gcnew StreamWriter( Application::ExecutablePath-
>Replace("MOLE.exe","user\\mFriend.ms"));
        sw->WriteLine("FUser = "+userName);
        sw->WriteLine("AddU = 2");
        sw->Close();
        System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("MOLE.exe","mFriend.jar"))->WaitForExit();
    }
private: System::Void btnExam_Click(System::Object^ sender, System::EventArgs^ e) {
    try{
        this->Hide();

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("MOLE.exe","mExams.exe"))->WaitForExit();
        this->Show();
    }catch(Exception ^e){
        this->Show();
        MessageBox::Show("We Encountered a Problem. " + e->Message +
" Restart the Application and Try Again.");
    }
}
};
}

```

ii. Remember These! Tips

Remember These! - Important for the Exam and for your Life											
Trigonometric Ratios Multiplication Table				Simple Code for Your Life Square Table				When to Practice Maths Theorems of Geometry			
1	2	3	4	5	6	7	8	9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	11	24
3	6	9	12	15	18	21	24	27	30	22	36
4	8	12	16	20	24	28	32	36	40	33	48
5	10	15	20	25	30	35	40	45	50	44	60
6	12	18	24	30	36	42	48	54	60	55	72
7	14	21	28	35	42	49	56	63	70	66	84
8	16	24	32	40	48	56	64	72	80	77	96
9	18	27	36	45	54	63	72	81	90	88	108
10	20	30	40	50	60	70	80	90	100	99	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

Remember These! - Important for the Exam and for your Life											
Trigonometric Ratios Multiplication Table				Simple Code for Your Life Square Table				When to Practice Maths Theorems of Geometry			
1	2	3	4	5	6	7	8	9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	11	24
3	6	9	12	15	18	21	24	27	30	22	36
4	8	12	16	20	24	28	32	36	40	33	48
5	10	15	20	25	30	35	40	45	50	44	60
6	12	18	24	30	36	42	48	54	60	55	72
7	14	21	28	35	42	49	56	63	70	66	84
8	16	24	32	40	48	56	64	72	80	77	96
9	18	27	36	45	54	63	72	81	90	88	108
10	20	30	40	50	60	70	80	90	100	99	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

Remember These! - Important for the Exam and for your Life											
Trigonometric Ratios Multiplication Table				Simple Code for Your Life Square Table				When to Practice Maths Theorems of Geometry			
1	2	3	4	5	6	7	8	9	10	11	12
Theorem 1	- Vertically opposite angles are equal in magnitude.										
Theorem 2	- Sum of interior angles in a triangle is 180°										
Theorem 3	- Exterior angle in a triangle equals sum of opposite interior angles in a triangle.										
Theorem 4	- If two sides of a triangle are equal the angles opposite these sides are equal.										
Theorem 5	- In a parallelogram, the opposite sides, angles are equal and each diagonal bisects the area of the parallelogram.										
Theorem 6	- Midpoint, The line joining the mid points of two sides of a triangle is parallel to the third side and is half the size of the third side.										
Theorem 7	- The line joining the centre of a circle to the mid point of a chord is perpendicular to the chord.										
Theorem 8	- The angle subtended by an arc of a circle at the centre is equal to twice the angle subtended by it on the circle.										
Theorem 9	- The opposite angles of a cyclic quadrilateral are supplementary.										
Theorem 10	- When two tangents are drawn to a circle from an external point., then 1. Two tangents are equal in length. 2. The angles subtended by the tangents at the centre of the circle are equal.										

Geometric Theorems

Theorem 1 - Vertically opposite angles are equal in magnitude.

$\hat{AOC} = \hat{BOD}$ (vertically Opposite Angles)
 $\hat{AOB} = \hat{COD}$ (vertically Opposite Angles)

Geometric Theorems

Theorem 2 - Sum of interior angles in a triangle is 180°

$\hat{ABC} + \hat{BCA} + \hat{BAC} = 180^\circ$

Geometric Theorems

Theorem 3 - Exterior angle in a triangle equals sum of opposite angles in a triangle.

$\hat{ABD} + \hat{BAD} = \hat{x}$

Geometric Theorems

Theorem 4 - If two sides of a triangle are equal the angles opposite these sides are also equal. Also known as Isoceles Triangles.

$AB = AC$
 $\hat{ABC} = \hat{ACB}$ (Isosceles Triangle)
and also $\hat{ABC} + \hat{ACB} = 90^\circ$ (Sum of interior angles of a triangle = 180°)

Geometric Theorems

Theorem 5 - In a parallelogram

1. The opposite sides are equal ($AB = DC$, $BC = AD$)
2. The opposite angles are equal ($D\hat{A}B = D\hat{C}B$, $A\hat{B}C = C\hat{D}A$)
3. Each diagonal bisects the area of the parallelogram ($\Delta ACD = \Delta ACB$)

1 2 3

Geometric Theorems

Theorem 6 - The line joining the mid point of two sides of a triangle is parallel to the third side and is half the size of the third side.

$DE \parallel BC$
 $\frac{1}{2} BC = DE$

Geometric Theorems

Theorem 7 - The line joining the centre of a circle to the mid point of a chord is perpendicular to the chord.

$AD = DB$
 $OD \perp AB$

Geometric Theorems

Theorem 8 - The angle subtended by an arc of a circle at the centre is equal to twice the angle subtended by it on the circle.

$A\hat{D}B = 2A\hat{O}B$

Geometric Theorems

Theorem 9 - The opposite angles of a cyclic quadrilateral are supplementary.

$\hat{ADC} + \hat{ABC} = 180^\circ$
 $\hat{BAD} + \hat{DCB} = 180^\circ$
 therefore,
 $ADC = ABC = 90^\circ$
 $BAD = DCB = 90^\circ$

Geometric Theorems

Theorem 10 - When two tangents are drawn to a circle from an external point, then

1. Two tangents are equal in length ($AB = AC$)
2. The angles subtended by the tangents at the centre of the circle are equal ($OAB = OAC$)
3. The line joining the centre to the external point bisects the angle between the tangents

1 2 3

Remember These!

Remember These! - Important for the Exam and for your Life

Multiplication Table	Square Table	Theorems of Geometry
Trigonometric Ratios	Simple Code for Your Life	When to Practice Maths

When to Practice Maths ?

There is no actual time to practice maths because it needs regular practice, so I suggest you practice maths not as studying a subject but as playing a game.

To be more clear when you are watching TV, listening to music or e.t.c take a piece of paper and a pen/pencil and workout the lessons that you think are hard for you, so when you practice them regularly.

Eventually you'll get the hang of it and you'll be damn good at it.

Maths is not a subject to study but a game to practice.
The more you practice maths the more you understand to work it out

Remember These!

Remember These! - Important for the Exam and for your Life

Multiplication Table Trigonometric Ratios	Square Table Simple Code for Your Life	Theorems of Geometry When to Practice Maths
--	---	--

Live your life according to a code , so then it will guide you through your life's journey

- 1. Always believe in yourself**
- 2. Don't let doubt trouble you**
- 3. Help the helpless and the ones in-need**
- 4. Speak the truth always even if it leads to your death**
- 5. When studying honestly dedicate your time for it**
- 6. Always study with a happy and joyful mind**
- 7. Respect your knowledge sources that brings you knowledge**
- 8. Do no wrong for yourself or for others**
- 9. Respect and Honour your Religion and your Elders**
- 10. Love your country and treat as your own mother**

Remember These!

Remember These! - Important for the Exam and for your Life

Multiplication Table Trigonometric Ratios	Square Table Simple Code for Your Life	Theorems of Geometry When to Practice Maths
--	---	--

	0°	30°	45°	60°	90°
$\sin \theta$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\cos \theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\tan \theta$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	$\pm \infty$

1. rem.cpp

```
#include "rem.h"
```

2. rem.h

```
#pragma once
#include "rem_theorem.h"

namespace MOLE {

    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 rem
    /// </summary>
    public ref class rem : public System::Windows::Forms::Form
    {
    public:
        rem_theorem theorem;
        rem(void)
        {
            InitializeComponent();
            //
            //TODO: Add the constructor code here
            //
        }

    protected:
        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        ~rem()
        {
            if (components)
            {
                delete components;
            }
        }
    internal: System::Windows::Forms::ToolTip^ ToolTip1;
    protected:
        internal: System::Windows::Forms::Label^ Label17;
        internal: System::Windows::Forms::Label^ Label19;
        internal: System::Windows::Forms::Label^ Label21;
        internal: System::Windows::Forms::Label^ Label23;
        internal: System::Windows::Forms::Label^ Label25;
        internal: System::Windows::Forms::Label^ Label15;
        internal: System::Windows::Forms::Label^ Label11;
```

```

internal: System::Windows::Forms::Label^  Label13;
internal: System::Windows::Forms::Label^  Label9;
internal: System::Windows::Forms::Label^  Label7;

internal: System::Windows::Forms::TabPage^  TabPage4;

internal: System::Windows::Forms::TabPage^  TabPage5;

internal: System::Windows::Forms::TabPage^  TabPage3;
internal: System::Windows::Forms::TabControl^  TabControl1;
internal: System::Windows::Forms::TabPage^  TabPage6;
internal: System::Windows::Forms::Label^  Label16;
internal: System::Windows::Forms::Label^  Label18;
internal: System::Windows::Forms::Label^  Label20;
internal: System::Windows::Forms::Label^  Label22;
internal: System::Windows::Forms::Label^  Label24;
internal: System::Windows::Forms::Label^  Label14;
internal: System::Windows::Forms::Label^  Label10;
internal: System::Windows::Forms::Label^  Label12;
internal: System::Windows::Forms::Label^  Label8;
internal: System::Windows::Forms::Label^  Label29;
internal: System::Windows::Forms::TabPage^  TabPage1;
internal: System::Windows::Forms::Label^  Label4;
internal: System::Windows::Forms::Label^  Label2;
internal: System::Windows::Forms::TabPage^  TabPage2;
internal: System::Windows::Forms::Label^  Label5;
internal: System::Windows::Forms::Label^  Label3;
internal: System::Windows::Forms::Label^  Label1;
internal: System::Windows::Forms::Panel^  Panel1;
internal: System::Windows::Forms::Label^  Label6;

internal:

private:

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

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^  resources =
(gcnew System::ComponentModel::ComponentResourceManager(rem::typeid));
        this->ToolTip1 = (gcnew System::Windows::Forms::ToolTip(this-
>components));
        this->Label17 = (gcnew System::Windows::Forms::Label());
    }

```

```

this->Label19 = (gcnew System::Windows::Forms::Label());
this->Label21 = (gcnew System::Windows::Forms::Label());
this->Label23 = (gcnew System::Windows::Forms::Label());
this->Label25 = (gcnew System::Windows::Forms::Label());
this->Label15 = (gcnew System::Windows::Forms::Label());
this->Label11 = (gcnew System::Windows::Forms::Label());
this->Label13 = (gcnew System::Windows::Forms::Label());
this->Label9 = (gcnew System::Windows::Forms::Label());
this->Label7 = (gcnew System::Windows::Forms::Label());
this->TabPage4 = (gcnew System::Windows::Forms::TabPage());
this->TabPage5 = (gcnew System::Windows::Forms::TabPage());
this->TabPage3 = (gcnew System::Windows::Forms::TabPage());
this->TabControl1 = (gcnew System::Windows::Forms::TabControl());
this->TabPage6 = (gcnew System::Windows::Forms::TabPage());
this->Label16 = (gcnew System::Windows::Forms::Label());
this->Label18 = (gcnew System::Windows::Forms::Label());
this->Label20 = (gcnew System::Windows::Forms::Label());
this->Label22 = (gcnew System::Windows::Forms::Label());
this->Label24 = (gcnew System::Windows::Forms::Label());
this->Label14 = (gcnew System::Windows::Forms::Label());
this->Label10 = (gcnew System::Windows::Forms::Label());
this->Label12 = (gcnew System::Windows::Forms::Label());
this->Label18 = (gcnew System::Windows::Forms::Label());
this->Label29 = (gcnew System::Windows::Forms::Label());
this->TabPage1 = (gcnew System::Windows::Forms::TabPage());
this->Label4 = (gcnew System::Windows::Forms::Label());
this->Label2 = (gcnew System::Windows::Forms::Label());
this->TabPage2 = (gcnew System::Windows::Forms::TabPage());
this->Label5 = (gcnew System::Windows::Forms::Label());
this->Label3 = (gcnew System::Windows::Forms::Label());
this->Label1 = (gcnew System::Windows::Forms::Label());
this->Panel1 = (gcnew System::Windows::Forms::Panel());
this->Label6 = (gcnew System::Windows::Forms::Label());
this->TabControl1->SuspendLayout();
this->TabPage6->SuspendLayout();
this->TabPage1->SuspendLayout();
this->TabPage2->SuspendLayout();
this->Panel1->SuspendLayout();
this->SuspendLayout();
//
// ToolTip1
//
this->ToolTip1->IsBalloon = true;
this->ToolTip1->ToolTipIcon =
System::Windows::Forms::ToolTipIcon::Info;
this->ToolTip1->ToolTipTitle = L"Theorems of Geometry";
//
// Label17
//
this->Label17->AutoSize = true;
this->Label17->Cursor = System::Windows::Forms::.Cursors::Hand;
this->Label17->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline)),
System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label17->ForeColor = System::Drawing::Color::Black;
this->Label17->Location = System::Drawing::Point(12, 395);

```

```

    this->Label17->Name = L"Label17";
    this->Label17->Size = System::Drawing::Size(92, 18);
    this->Label17->TabIndex = 41;
    this->Label17->Text = L"Theorem 10";
    this->ToolTip1->SetToolTip(this->Label17, L"Click on for more
information");
    this->Label17->Click += gcnew System::EventHandler(this,
&rem::Label17_Click);
    //
    // Label19
    //
    this->Label19->AutoSize = true;
    this->Label19->Cursor = System::Windows::Forms::Cursors::Hand;
    this->Label19->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
    System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0));
    this->Label19->ForeColor = System::Drawing::Color::Black;
    this->Label19->Location = System::Drawing::Point(12, 358);
    this->Label19->Name = L"Label19";
    this->Label19->Size = System::Drawing::Size(84, 18);
    this->Label19->TabIndex = 39;
    this->Label19->Text = L"Theorem 9";
    this->ToolTip1->SetToolTip(this->Label19, L"Click on for more
information");
    this->Label19->Click += gcnew System::EventHandler(this,
&rem::Label19_Click);
    //
    // Label21
    //
    this->Label21->AutoSize = true;
    this->Label21->Cursor = System::Windows::Forms::Cursors::Hand;
    this->Label21->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
    System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0));
    this->Label21->ForeColor = System::Drawing::Color::Black;
    this->Label21->Location = System::Drawing::Point(12, 309);
    this->Label21->Name = L"Label21";
    this->Label21->Size = System::Drawing::Size(84, 18);
    this->Label21->TabIndex = 37;
    this->Label21->Text = L"Theorem 8";
    this->ToolTip1->SetToolTip(this->Label21, L"Click on for more
information");
    this->Label21->Click += gcnew System::EventHandler(this,
&rem::Label21_Click);
    //
    // Label23
    //
    this->Label23->AutoSize = true;
    this->Label23->Cursor = System::Windows::Forms::Cursors::Hand;
    this->Label23->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
    System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0));

```

```

        this->Label23->ForeColor = System::Drawing::Color::Black;
        this->Label23->Location = System::Drawing::Point(12, 267);
        this->Label23->Name = L"Label23";
        this->Label23->Size = System::Drawing::Size(84, 18);
        this->Label23->TabIndex = 35;
        this->Label23->Text = L"Theorem 7";
        this->ToolTip1->SetToolTip(this->Label23, L"Click on for more
information");
        this->Label23->Click += gcnew System::EventHandler(this,
&rem::Label23_Click);
        //
        // Label25
        //
        this->Label25->AutoSize = true;
        this->Label25->Cursor = System::Windows::Forms::.Cursors::Hand;
        this->Label25->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
        System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->Label25->ForeColor = System::Drawing::Color::Black;
        this->Label25->Location = System::Drawing::Point(12, 220);
        this->Label25->Name = L"Label25";
        this->Label25->Size = System::Drawing::Size(84, 18);
        this->Label25->TabIndex = 33;
        this->Label25->Text = L"Theorem 6";
        this->ToolTip1->SetToolTip(this->Label25, L"Click on for more
information");
        this->Label25->Click += gcnew System::EventHandler(this,
&rem::Label25_Click);
        //
        // Label15
        //
        this->Label15->AutoSize = true;
        this->Label15->Cursor = System::Windows::Forms::.Cursors::Hand;
        this->Label15->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
        System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->Label15->ForeColor = System::Drawing::Color::Black;
        this->Label15->Location = System::Drawing::Point(12, 174);
        this->Label15->Name = L"Label15";
        this->Label15->Size = System::Drawing::Size(84, 18);
        this->Label15->TabIndex = 31;
        this->Label15->Text = L"Theorem 5";
        this->ToolTip1->SetToolTip(this->Label15, L"Click on for more
information");
        this->Label15->Click += gcnew System::EventHandler(this,
&rem::Label15_Click);
        //
        // Label11
        //
        this->Label11->AutoSize = true;
        this->Label11->Cursor = System::Windows::Forms::.Cursors::Hand;
        this->Label11->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),

```

```

System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0));
this->Label11->ForeColor = System::Drawing::Color::Black;
this->Label11->Location = System::Drawing::Point(12, 135);
this->Label11->Name = L"Label11";
this->Label11->Size = System::Drawing::Size(84, 18);
this->Label11->TabIndex = 29;
this->Label11->Text = L"Theorem 4";
this->ToolTip1->SetToolTip(this->Label11, L"Click on for more
information");
this->Label11->Click += gcnew System::EventHandler(this,
&rem::Label11_Click);
//
// Label13
//
this->Label13->AutoSize = true;
this->Label13->Cursor = System::Windows::Forms::Cursors::Hand;
this->Label13->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0));
this->Label13->ForeColor = System::Drawing::Color::Black;
this->Label13->Location = System::Drawing::Point(12, 97);
this->Label13->Name = L"Label13";
this->Label13->Size = System::Drawing::Size(84, 18);
this->Label13->TabIndex = 27;
this->Label13->Text = L"Theorem 3";
this->ToolTip1->SetToolTip(this->Label13, L"Click on for more
information");
this->Label13->Click += gcnew System::EventHandler(this,
&rem::Label13_Click);
//
// Label9
//
this->Label9->AutoSize = true;
this->Label9->Cursor = System::Windows::Forms::Cursors::Hand;
this->Label9->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0));
this->Label9->ForeColor = System::Drawing::Color::Black;
this->Label9->Location = System::Drawing::Point(12, 55);
this->Label9->Name = L"Label9";
this->Label9->Size = System::Drawing::Size(84, 18);
this->Label9->TabIndex = 25;
this->Label9->Text = L"Theorem 2";
this->ToolTip1->SetToolTip(this->Label9, L"Click on for more
information");
this->Label9->Click += gcnew System::EventHandler(this,
&rem::Label9_Click);
//
// Label7
//
this->Label7->AutoSize = true;
this->Label7->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

        this->Label7->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
static_cast<System::Drawing::FontStyle>((System::Drawing::FontStyle::Bold |
System::Drawing::FontStyle::Underline))),
System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label7->ForeColor = System::Drawing::Color::Black;
this->Label7->Location = System::Drawing::Point(12, 17);
this->Label7->Name = L"Label7";
this->Label7->Size = System::Drawing::Size(84, 18);
this->Label7->TabIndex = 16;
this->Label7->Text = L"Theorem 1";
this->ToolTip1->SetToolTip(this->Label7, L"Click on for more
information");
this->Label7->Click += gcnew System::EventHandler(this,
&rem::Label7_Click);
//
// tabPage4
//
this->TabPage4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"TabPage4.BackgroundImage")));
this->TabPage4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->TabPage4->Location = System::Drawing::Point(4, 40);
this->TabPage4->Name = L"TabPage4";
this->TabPage4->Size = System::Drawing::Size(632, 453);
this->TabPage4->TabIndex = 3;
this->TabPage4->Text = L"Square Table";
this->TabPage4->UseVisualStyleBackColor = true;
//
// tabPage5
//
this->TabPage5->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"TabPage5.BackgroundImage")));
this->TabPage5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->TabPage5->Location = System::Drawing::Point(4, 40);
this->TabPage5->Name = L"TabPage5";
this->TabPage5->Size = System::Drawing::Size(632, 453);
this->TabPage5->TabIndex = 4;
this->TabPage5->Text = L"Multiplication Table";
this->TabPage5->UseVisualStyleBackColor = true;
//
// tabPage3
//
this->TabPage3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"TabPage3.BackgroundImage")));
this->TabPage3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->TabPage3->Location = System::Drawing::Point(4, 40);
this->TabPage3->Name = L"TabPage3";
this->TabPage3->Size = System::Drawing::Size(632, 453);
this->TabPage3->TabIndex = 2;
this->TabPage3->Text = L"Trigonometric Ratios";
this->TabPage3->UseVisualStyleBackColor = true;
//

```

```

// TabControl1
//
this->TabControl1->Controls->Add(this->TabPage5);
this->TabControl1->Controls->Add(this->TabPage4);
this->TabControl1->Controls->Add(this->TabPage6);
this->TabControl1->Controls->Add(this->TabPage3);
this->TabControl1->Controls->Add(this->TabPage1);
this->TabControl1->Controls->Add(this->TabPage2);
this->TabControl1->Cursor = System::Windows::Forms::Cursors::Arrow;
this->TabControl1->Location = System::Drawing::Point(5, 45);
this->TabControl1->Multiline = true;
this->TabControl1->Name = L"TabControl1";
this->TabControl1->SelectedIndex = 0;
this->TabControl1->Size = System::Drawing::Size(640, 497);
this->TabControl1->SizeMode =
System::Windows::Forms::TabSizeMode::FillToRight;
this->TabControl1->TabIndex = 3;
//
// tabPage6
//
this->TabPage6->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"TabPage6.BackgroundImage")));
this->TabPage6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->TabPage6->Controls->Add(this->Label16);
this->TabPage6->Controls->Add(this->Label17);
this->TabPage6->Controls->Add(this->Label18);
this->TabPage6->Controls->Add(this->Label19);
this->TabPage6->Controls->Add(this->Label20);
this->TabPage6->Controls->Add(this->Label21);
this->TabPage6->Controls->Add(this->Label22);
this->TabPage6->Controls->Add(this->Label23);
this->TabPage6->Controls->Add(this->Label24);
this->TabPage6->Controls->Add(this->Label25);
this->TabPage6->Controls->Add(this->Label14);
this->TabPage6->Controls->Add(this->Label15);
this->TabPage6->Controls->Add(this->Label10);
this->TabPage6->Controls->Add(this->Label11);
this->TabPage6->Controls->Add(this->Label12);
this->TabPage6->Controls->Add(this->Label13);
this->TabPage6->Controls->Add(this->Label18);
this->TabPage6->Controls->Add(this->Label19);
this->TabPage6->Controls->Add(this->Label29);
this->TabPage6->Controls->Add(this->Label17);
this->TabPage6->Location = System::Drawing::Point(4, 40);
this->TabPage6->Name = L"TabPage6";
this->TabPage6->Size = System::Drawing::Size(632, 453);
this->TabPage6->TabIndex = 5;
this->TabPage6->Text = L"Theorems of Geometry";
this->TabPage6->UseVisualStyleBackColor = true;
//
// Label16
//
this->Label16->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label16->ForeColor = System::Drawing::Color::Black;

```

```

this->Label16->Location = System::Drawing::Point(99, 396);
this->Label16->Name = L"Label16";
this->Label16->Size = System::Drawing::Size(530, 57);
this->Label16->TabIndex = 42;
this->Label16->Text = L" - When two tangents are drawn to a circle
from an external point., then\r\n    1. T"
                                L"wo tangents are equal in length.\r\n    2. The angles
subtended by the tangents at "
                                L"the centre of the circle are equal.";
//
// Label18
//
this->Label18->AutoSize = true;
this->Label18->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label18->ForeColor = System::Drawing::Color::Black;
this->Label18->Location = System::Drawing::Point(92, 359);
this->Label18->Name = L"Label18";
this->Label18->Size = System::Drawing::Size(387, 16);
this->Label18->TabIndex = 40;
this->Label18->Text = L" - The opposite angles of a cyclic
quadrilateral are suplimentary.";
//
// Label20
//
this->Label20->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label20->ForeColor = System::Drawing::Color::Black;
this->Label20->Location = System::Drawing::Point(92, 310);
this->Label20->Name = L"Label20";
this->Label20->Size = System::Drawing::Size(537, 36);
this->Label20->TabIndex = 38;
this->Label20->Text = L" - The angle subtended by an arc of a circle
at the centre is equal to twice the "
                                L"angle \r\n    subtended by it on the circle.";
//
// Label22
//
this->Label22->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label22->ForeColor = System::Drawing::Color::Black;
this->Label22->Location = System::Drawing::Point(92, 268);
this->Label22->Name = L"Label22";
this->Label22->Size = System::Drawing::Size(540, 41);
this->Label22->TabIndex = 36;
this->Label22->Text = L" - The line joining the centre of a circle
to the mid point of a chord is perpend"
                                L"icular to the\r\n    chord.";
//
// Label24
//
this->Label24->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label24->ForeColor = System::Drawing::Color::Black;

```

```

this->Label24->Location = System::Drawing::Point(92, 221);
this->Label24->Name = L"Label24";
this->Label24->Size = System::Drawing::Size(538, 37);
this->Label24->TabIndex = 34;
this->Label24->Text = L" - Midpoint, The line joining the mid points
of two sides of a triangle is parallel
                           L"el to the third \r\n      side and is half the size of the
third side.";
//
// Label14
//
this->Label14->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label14->ForeColor = System::Drawing::Color::Black;
this->Label14->Location = System::Drawing::Point(92, 175);
this->Label14->Name = L"Label14";
this->Label14->Size = System::Drawing::Size(537, 36);
this->Label14->TabIndex = 32;
this->Label14->Text = L" - In a parallelogram , the opposite
sides, angles are equal and each diagonal bis"
                           L"ects the \r\n      area of the parallelogram.";
//
// Label10
//
this->Label10->AutoSize = true;
this->Label10->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label10->ForeColor = System::Drawing::Color::Black;
this->Label10->Location = System::Drawing::Point(92, 136);
this->Label10->Name = L"Label10";
this->Label10->Size = System::Drawing::Size(462, 16);
this->Label10->TabIndex = 30;
this->Label10->Text = L" - If two sides of a triangle are equal the
angles opposite these sides are equal"
                           L".";
//
// Label12
//
this->Label12->AutoSize = true;
this->Label12->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label12->ForeColor = System::Drawing::Color::Black;
this->Label12->Location = System::Drawing::Point(92, 98);
this->Label12->Name = L"Label12";
this->Label12->Size = System::Drawing::Size(469, 16);
this->Label12->TabIndex = 28;
this->Label12->Text = L" - Exterior angle in a triangle equals sum
of opposite interior angles in a triangle"
                           L"gle.";
//
// Label8
//
this->Label8->AutoSize = true;
this->Label8->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,

```

```

        static_cast<System::Byte>(0)));
this->Label8->ForeColor = System::Drawing::Color::Black;
this->Label8->Location = System::Drawing::Point(92, 56);
this->Label8->Name = L"Label8";
this->Label8->Size = System::Drawing::Size(261, 16);
this->Label8->TabIndex = 26;
this->Label8->Text = L"- Sum of interior angles in a triangle is
180°";
//
// Label29
//
this->Label29->AutoSize = true;
this->Label29->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label29->ForeColor = System::Drawing::Color::Black;
this->Label29->Location = System::Drawing::Point(92, 18);
this->Label29->Name = L"Label29";
this->Label29->Size = System::Drawing::Size(307, 16);
this->Label29->TabIndex = 24;
this->Label29->Text = L"- Vertically opposite angles are equal in
magnitude.";
//
// TabPage1
//
this->TabPage1->BackColor = System::Drawing::Color::Gold;
this->TabPage1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"TabPage1.BackgroundImage")));
this->TabPage1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->TabPage1->Controls->Add(this->Label14);
this->TabPage1->Controls->Add(this->Label12);
this->TabPage1->ForeColor = System::Drawing::Color::Black;
this->TabPage1->Location = System::Drawing::Point(4, 40);
this->TabPage1->Name = L"TabPage1";
this->TabPage1->Padding = System::Windows::Forms::Padding(3);
this->TabPage1->Size = System::Drawing::Size(632, 453);
this->TabPage1->TabIndex = 0;
this->TabPage1->Text = L"Simple Code for Your Life";
//
// Label4
//
this->Label4->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->Label4->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label4->Image = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"Label4.Image")));
this->Label4->Location = System::Drawing::Point(-1, 2);
this->Label4->Name = L"Label4";
this->Label4->Size = System::Drawing::Size(635, 36);
this->Label4->TabIndex = 1;
this->Label4->Text = L"Live your life according to a code , so then
it will guide your through your life"
L"\'s journey";

```

```

        this->Label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// Label2
//
this->Label2->BackColor = System::Drawing::Color::Transparent;
this->Label2->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label2->ForeColor = System::Drawing::Color::White;
this->Label2->Location = System::Drawing::Point(18, 43);
this->Label2->Name = L"Label2";
this->Label2->Size = System::Drawing::Size(594, 357);
this->Label2->TabIndex = 0;
this->Label2->Text = resources->GetString(L"Label2.Text");
this->Label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
// TabPage2
//
this->TabPage2->BackColor = System::Drawing::Color::Black;
this->TabPage2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"TabPage2.BackgroundImage")));
        this->TabPage2->Controls->Add(this->Label5);
        this->TabPage2->Controls->Add(this->Label3);
        this->TabPage2->Location = System::Drawing::Point(4, 40);
        this->TabPage2->Name = L"TabPage2";
        this->TabPage2->Padding = System::Windows::Forms::Padding(3);
        this->TabPage2->Size = System::Drawing::Size(632, 453);
        this->TabPage2->TabIndex = 1;
        this->TabPage2->Text = L"When to Practice Maths";
        //
// Label5
//
this->Label5->BackColor = System::Drawing::Color::Gold;
this->Label5->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->Label5->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->Label5->ForeColor = System::Drawing::Color::Black;
        this->Label5->Image = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"Label5.Image")));
        this->Label5->Location = System::Drawing::Point(-4, 2);
        this->Label5->Name = L"Label5";
        this->Label5->Size = System::Drawing::Size(635, 36);
        this->Label5->TabIndex = 2;
        this->Label5->Text = L"When to Practice Maths \?";
        this->Label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// Label3
//
this->Label3->BackColor = System::Drawing::Color::Transparent;
this->Label3->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

        this->Label3->ForeColor = System::Drawing::Color::Black;
        this->Label3->Location = System::Drawing::Point(9, 52);
        this->Label3->Name = L"Label3";
        this->Label3->Size = System::Drawing::Size(617, 239);
        this->Label3->TabIndex = 1;
        this->Label3->Text = resources->GetString(L"Label3.Text");
        this->Label3-> TextAlign =
System::Drawing::ContentAlignment::TopCenter;
        //
// Label1
//
this->Label1->AutoSize = true;
this->Label1->BackColor = System::Drawing::Color::Transparent;
this->Label1->Font = (gcnew System::Drawing::Font(L"Arial Black",
20.25F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label1->ForeColor = System::Drawing::Color::Black;
this->Label1->Location = System::Drawing::Point(41, -1);
this->Label1->Name = L"Label1";
this->Label1->Size = System::Drawing::Size(285, 38);
this->Label1->TabIndex = 0;
this->Label1->Text = L"Remember These!";
//
// Panel1
//
this->Panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"Panel1.BackgroundImage")));
this->Panel1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->Panel1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->Panel1->Controls->Add(this->Label6);
this->Panel1->Controls->Add(this->Label1);
this->Panel1->Location = System::Drawing::Point(-4, 3);
this->Panel1->Name = L"Panel1";
this->Panel1->Size = System::Drawing::Size(686, 40);
this->Panel1->TabIndex = 2;
//
// Label6
//
this->Label6->AutoSize = true;
this->Label6->BackColor = System::Drawing::Color::Transparent;
this->Label6->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label6->ForeColor = System::Drawing::Color::Black;
this->Label6->Location = System::Drawing::Point(322, 10);
this->Label6->Name = L"Label6";
this->Label6->Size = System::Drawing::Size(324, 19);
this->Label6->TabIndex = 1;
this->Label6->Text = L"- Important for the Exam and for your Life";
//
// rem
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->BackColor = System::Drawing::Color::Black;

```

```

        this->ClientSize = System::Drawing::Size(652, 544);
        this->Controls->Add(this->TabControl1);
        this->Controls->Add(this->Panel1);
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"rem";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"Remember These!";
        this->TabControl1->ResumeLayout(false);
        this->TabPage6->ResumeLayout(false);
        this->TabPage6->PerformLayout();
        this->TabPage1->ResumeLayout(false);
        this->TabPage2->ResumeLayout(false);
        this->Panel1->ResumeLayout(false);
        this->Panel1->PerformLayout();
        this->ResumeLayout(false);

    }

#pragma endregion
private: System::Void Label7_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 1;
    theorem.ShowDialog();
}
private: System::Void Label9_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 2;
    theorem.ShowDialog();
}
private: System::Void Label13_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 3;
    theorem.ShowDialog();
}
private: System::Void Label11_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 4;
    theorem.ShowDialog();
}
private: System::Void Label15_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 5;
    theorem.ShowDialog();
}
private: System::Void Label25_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 6;
    theorem.ShowDialog();
}
private: System::Void Label23_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 7;
    theorem.ShowDialog();
}
private: System::Void Label21_Click(System::Object^  sender, System::EventArgs^  e) {
    theorem.p = 8;
    theorem.ShowDialog();
}
private: System::Void Label19_Click(System::Object^  sender, System::EventArgs^  e) {

```

```

        theorem.p = 9;
        theorem.ShowDialog();
    }
private: System::Void Label17_Click(System::Object^ sender, System::EventArgs^ e) {
    theorem.p = 10;
    theorem.ShowDialog();
}
};}

```

3. rem therorem.cpp

```
#include "rem_theorem.h"
```

4. rem theorem.h

```

#pragma once

namespace MOLE {

    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 rem_theorem
    /// </summary>
public ref class rem_theorem : public System::Windows::Forms::Form
{
public:
    rem_theorem(void)
    {
        InitializeComponent();
        //
        //TODO: Add the constructor code here
        //
    }
private: System::Windows::Forms::Panel^ t2;
private: System::Windows::Forms::Panel^ t3;
private: System::Windows::Forms::Panel^ t4;
private: System::Windows::Forms::Panel^ t5;
private: System::Windows::Forms::Panel^ t6;
private: System::Windows::Forms::Panel^ t7;
private: System::Windows::Forms::Panel^ t8;
private: System::Windows::Forms::Panel^ t9;
private: System::Windows::Forms::Panel^ t10;

public:
    int p;

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>

```

```

~rem_theorem()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::Panel^ t1;
protected:

protected:

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
    System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(rem_theorem::typeid));
        this->t1 = (gcnew System::Windows::Forms::Panel());
        this->t2 = (gcnew System::Windows::Forms::Panel());
        this->t3 = (gcnew System::Windows::Forms::Panel());
        this->t4 = (gcnew System::Windows::Forms::Panel());
        this->t5 = (gcnew System::Windows::Forms::Panel());
        this->t6 = (gcnew System::Windows::Forms::Panel());
        this->t7 = (gcnew System::Windows::Forms::Panel());
        this->t8 = (gcnew System::Windows::Forms::Panel());
        this->t9 = (gcnew System::Windows::Forms::Panel());
        this->t10 = (gcnew System::Windows::Forms::Panel());
        this->SuspendLayout();
        //
        // t1
        //
        this->t1->BackColor = System::Drawing::Color::Transparent;
        this->t1->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t1.BackgroundImage")));
        this->t1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->t1->Location = System::Drawing::Point(12, 339);
        this->t1->Name = L"t1";
        this->t1->Size = System::Drawing::Size(44, 31);
        this->t1->TabIndex = 0;
        this->t1->Visible = false;
        //
        // t2
        //
        this->t2->BackColor = System::Drawing::Color::Transparent;

```

```

        this->t2->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t2.BackgroundImage")));
        this->t2->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->t2->Location = System::Drawing::Point(62, 321);
        this->t2->Name = L"t2";
        this->t2->Size = System::Drawing::Size(64, 62);
        this->t2->TabIndex = 1;
        this->t2->Visible = false;
        //
        // t3
        //
        this->t3->BackColor = System::Drawing::Color::Transparent;
        this->t3->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t3.BackgroundImage")));
        this->t3->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->t3->Location = System::Drawing::Point(132, 321);
        this->t3->Name = L"t3";
        this->t3->Size = System::Drawing::Size(64, 62);
        this->t3->TabIndex = 2;
        this->t3->Visible = false;
        //
        // t4
        //
        this->t4->BackColor = System::Drawing::Color::Transparent;
        this->t4->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t4.BackgroundImage")));
        this->t4->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->t4->Location = System::Drawing::Point(202, 321);
        this->t4->Name = L"t4";
        this->t4->Size = System::Drawing::Size(64, 62);
        this->t4->TabIndex = 3;
        this->t4->Visible = false;
        //
        // t5
        //
        this->t5->BackColor = System::Drawing::Color::Transparent;
        this->t5->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t5.BackgroundImage")));
        this->t5->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->t5->Location = System::Drawing::Point(272, 321);
        this->t5->Name = L"t5";
        this->t5->Size = System::Drawing::Size(64, 62);
        this->t5->TabIndex = 4;
        this->t5->Visible = false;
        //
        // t6
        //
        this->t6->BackColor = System::Drawing::Color::Transparent;
        this->t6->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t6.BackgroundImage")));
        this->t6->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->t6->Location = System::Drawing::Point(342, 321);
        this->t6->Name = L"t6";

```

```

    this->t6->Size = System::Drawing::Size(64, 62);
    this->t6->TabIndex = 5;
    this->t6->Visible = false;
    //
    // t7
    //
    this->t7->BackColor = System::Drawing::Color::Transparent;
    this->t7->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t7.BackgroundImage")));
    this->t7->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->t7->Location = System::Drawing::Point(412, 321);
    this->t7->Name = L"t7";
    this->t7->Size = System::Drawing::Size(64, 62);
    this->t7->TabIndex = 6;
    this->t7->Visible = false;
    //
    // t8
    //
    this->t8->BackColor = System::Drawing::Color::Transparent;
    this->t8->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t8.BackgroundImage")));
    this->t8->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->t8->Location = System::Drawing::Point(482, 321);
    this->t8->Name = L"t8";
    this->t8->Size = System::Drawing::Size(64, 62);
    this->t8->TabIndex = 7;
    this->t8->Visible = false;
    //
    // t9
    //
    this->t9->BackColor = System::Drawing::Color::Transparent;
    this->t9->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t9.BackgroundImage")));
    this->t9->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->t9->Location = System::Drawing::Point(12, 253);
    this->t9->Name = L"t9";
    this->t9->Size = System::Drawing::Size(64, 62);
    this->t9->TabIndex = 8;
    this->t9->Visible = false;
    //
    // t10
    //
    this->t10->BackColor = System::Drawing::Color::Transparent;
    this->t10->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"t10.BackgroundImage")));
    this->t10->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->t10->Location = System::Drawing::Point(260, 161);
    this->t10->Name = L"t10";
    this->t10->Size = System::Drawing::Size(64, 62);
    this->t10->TabIndex = 9;
    this->t10->Visible = false;
    //
    // rem_theorem
    //

```

```

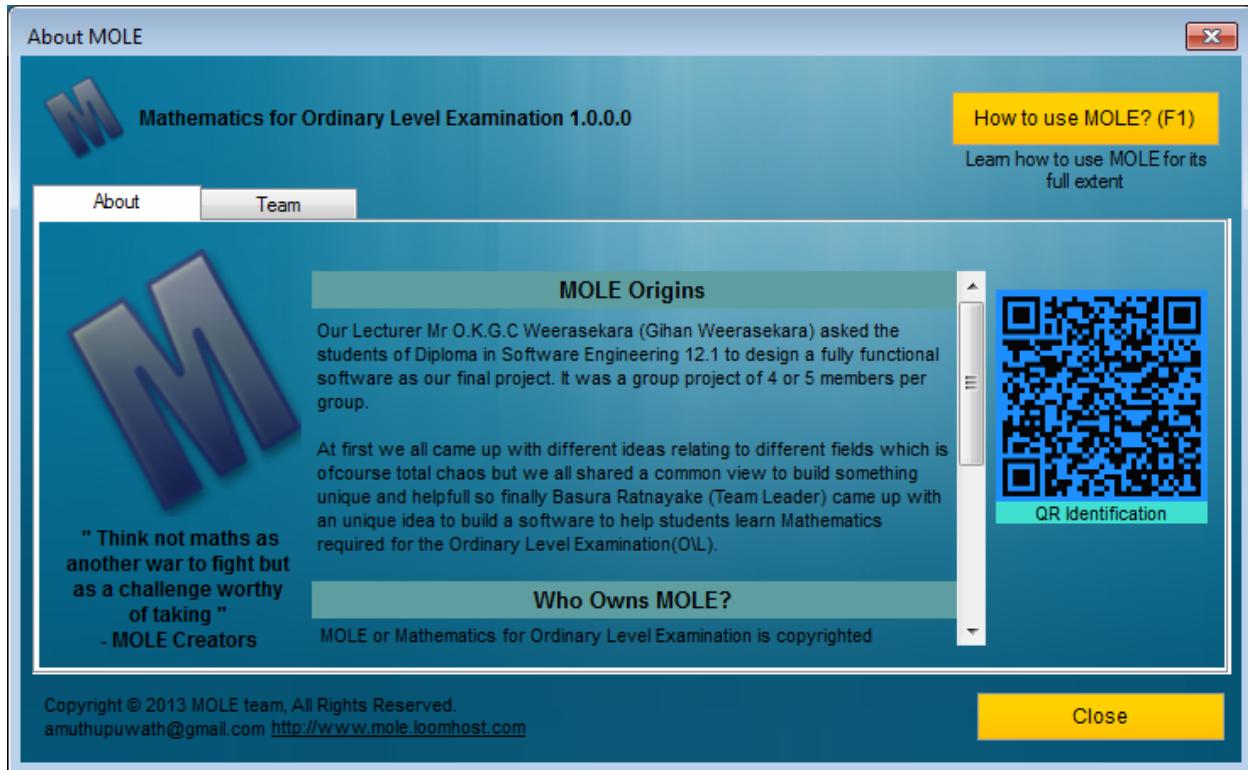
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->ClientSize = System::Drawing::Size(585, 385);
        this->Controls->Add(this->t10);
        this->Controls->Add(this->t9);
        this->Controls->Add(this->t8);
        this->Controls->Add(this->t7);
        this->Controls->Add(this->t6);
        this->Controls->Add(this->t5);
        this->Controls->Add(this->t4);
        this->Controls->Add(this->t3);
        this->Controls->Add(this->t2);
        this->Controls->Add(this->t1);
        this->ForeColor = System::Drawing::Color::Black;
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"rem_theorem";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"Geometric Theorems";
        this->FormClosing += gcnew
System::Windows::Forms::FormClosingEventHandler(this,
&rem_theorem::rem_theorem_FormClosing);
        this->Load += gcnew System::EventHandler(this,
&rem_theorem::rem_theorem_Load);
        this->ResumeLayout(false);

    }
#pragma endregion
    void setPanel(Panel^ pa){
        pa->Visible=true;
        pa->Location=System::Drawing::Point(12, 12);
        pa->Size=System::Drawing::Size(562, 358);
        pa->BringToFront();
    }
private: System::Void rem_theorem_Load(System::Object^  sender, System::EventArgs^
e) {
        if(p == 1){
            setPanel(t1);
        }else if(p == 2){
            setPanel(t2);
        }else if(p==3){
            setPanel(t3);
        }else if(p==4){
            setPanel(t4);
        }else if(p==5){
            setPanel(t5);
        }else if(p==6){
            setPanel(t6);
        }else if(p==7){
            setPanel(t7);
        }
    }
}

```

```
        }else if(p==8){
            setPanel(t8);
        }else if(p==9){
            setPanel(t9);
        }else if(p==10){
            setPanel(t10);
        }
    }
private: System::Void rem_theorem_FormClosing(System::Object^  sender,
System::Windows::Forms::FormClosingEventArgs^  e) {
    t1->Visible=false;
    t2->Visible=false;
    t3->Visible=false;
    t4->Visible=false;
    t5->Visible=false;
    t6->Visible=false;
    t7->Visible=false;
    t8->Visible=false;
    t9->Visible=false;
    t10->Visible=false;
}
};
```

iii. About MOLE



1. about.cpp

```
#include "about.h"
```

2. about.h

```
#pragma once

namespace MOLE {

    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 about
    /// </summary>
    public ref class about : public System::Windows::Forms::Form
    {
    public:
        about(void)
        {
            InitializeComponent();
            //
        }
}
```

```

        //TODO: Add the constructor code here
        //
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
~about()
{
    if (components)
    {
        delete components;
    }
}
internal: System::Windows::Forms::PictureBox^ PictureBox3;
protected:
internal: System::Windows::Forms::Label^ Label10;

internal: System::Windows::Forms::Button^ Button1;

internal:

private:

internal: System::Windows::Forms::TabPage^ TabPage8;

internal: System::Windows::Forms::PictureBox^ PictureBox2;
internal: System::Windows::Forms::Label^ Label8;
internal: System::Windows::Forms::TabControl^ TabControl2;
private: System::Windows::Forms::TabPage^ tabPage2;
internal:
internal: System::Windows::Forms::PictureBox^ PictureBox5;
private:
internal: System::Windows::Forms::Label^ Label13;
internal: System::Windows::Forms::Label^ Label14;
internal: System::Windows::Forms::Label^ Label15;
internal: System::Windows::Forms::PictureBox^ pictureBox1;
internal: System::Windows::Forms::Label^ label1;
internal: System::Windows::Forms::Label^ label3;
internal: System::Windows::Forms::Label^ label4;
internal: System::Windows::Forms::PictureBox^ pictureBox4;
internal: System::Windows::Forms::Label^ label5;
internal: System::Windows::Forms::Label^ label6;
internal: System::Windows::Forms::Label^ label7;
internal: System::Windows::Forms::PictureBox^ pictureBox7;
internal: System::Windows::Forms::Label^ label17;
internal: System::Windows::Forms::Label^ label18;
internal: System::Windows::Forms::Label^ label19;
internal: System::Windows::Forms::PictureBox^ pictureBox6;
internal: System::Windows::Forms::Label^ label9;
internal: System::Windows::Forms::Label^ label12;
internal: System::Windows::Forms::Label^ label16;

internal: System::Windows::Forms::PictureBox^ pictureBox8;
private: System::Windows::Forms::LinkLabel^ linkLabel1;
internal:
internal: System::Windows::Forms::Label^ Label11;

```

```
private:  
private: System::Windows::Forms::Panel^ panel1;  
internal:  
internal: System::Windows::Forms::Label^ Label2;  
  
internal:  
internal: System::Windows::Forms::Label^ label21;  
private:  
internal: System::Windows::Forms::Label^ label20;  
internal: System::Windows::Forms::Label^ label23;  
internal: System::Windows::Forms::Label^ label22;  
private: System::Windows::Forms::LinkLabel^ linkLabel2;  
internal: System::Windows::Forms::Label^ label24;  
internal: System::Windows::Forms::Button^ button2;  
internal: System::Windows::Forms::Label^ label25;  
private: System::Windows::Forms::PictureBox^ pictureBox9;  
internal:  
  
internal:  
  
internal:  
private:  
internal:  
private:  
private:  
internal:  
  
internal:  
  
private:  
  
internal:  
  
private:  
  
internal:  
  
private:  
  
private:  
  
private:  
  
private:  
    /// <summary>  
    /// Required designer variable.  
    /// </summary>  
    System::.ComponentModel::Container ^components;  
  
#pragma region Windows Form Designer generated code  
    /// <summary>  
    /// Required method for Designer support - do not modify  
    /// the contents of this method with the code editor.  
    /// </summary>  
    void InitializeComponent(void)  
    {
```

```

System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(about::typeid));
    this->PictureBox3 = (gcnew System::Windows::Forms::PictureBox());
    this->Label10 = (gcnew System::Windows::Forms::Label());
    this->Button1 = (gcnew System::Windows::Forms::Button());
    this->TabPage8 = (gcnew System::Windows::Forms::TabPage());
    this->label24 = (gcnew System::Windows::Forms::Label());
    this->pictureBox8 = (gcnew System::Windows::Forms::PictureBox());
    this->PictureBox2 = (gcnew System::Windows::Forms::PictureBox());
    this->Label8 = (gcnew System::Windows::Forms::Label());
    this->panel1 = (gcnew System::Windows::Forms::Panel());
    this->linkLabel12 = (gcnew System::Windows::Forms::LinkLabel());
    this->label23 = (gcnew System::Windows::Forms::Label());
    this->label22 = (gcnew System::Windows::Forms::Label());
    this->label21 = (gcnew System::Windows::Forms::Label());
    this->label20 = (gcnew System::Windows::Forms::Label());
    this->Label2 = (gcnew System::Windows::Forms::Label());
    this->TabControl1 = (gcnew System::Windows::Forms::TabControl());
    this->tabPage2 = (gcnew System::Windows::Forms::TabPage());
    this->pictureBox7 = (gcnew System::Windows::Forms::PictureBox());
    this->label17 = (gcnew System::Windows::Forms::Label());
    this->label18 = (gcnew System::Windows::Forms::Label());
    this->label19 = (gcnew System::Windows::Forms::Label());
    this->pictureBox6 = (gcnew System::Windows::Forms::PictureBox());
    this->label9 = (gcnew System::Windows::Forms::Label());
    this->label12 = (gcnew System::Windows::Forms::Label());
    this->label16 = (gcnew System::Windows::Forms::Label());
    this->pictureBox4 = (gcnew System::Windows::Forms::PictureBox());
    this->label5 = (gcnew System::Windows::Forms::Label());
    this->label6 = (gcnew System::Windows::Forms::Label());
    this->label7 = (gcnew System::Windows::Forms::Label());
    this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
    this->label1 = (gcnew System::Windows::Forms::Label());
    this->label3 = (gcnew System::Windows::Forms::Label());
    this->label4 = (gcnew System::Windows::Forms::Label());
    this->PictureBox5 = (gcnew System::Windows::Forms::PictureBox());
    this->Label13 = (gcnew System::Windows::Forms::Label());
    this->Label14 = (gcnew System::Windows::Forms::Label());
    this->Label15 = (gcnew System::Windows::Forms::Label());
    this->linkLabel1 = (gcnew System::Windows::Forms::LinkLabel());
    this->Label11 = (gcnew System::Windows::Forms::Label());
    this->button2 = (gcnew System::Windows::Forms::Button());
    this->label25 = (gcnew System::Windows::Forms::Label());
    this->pictureBox9 = (gcnew System::Windows::Forms::PictureBox());
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox3))->BeginInit();
        this->TabPage8->SuspendLayout();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox8))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox2))->BeginInit();
        this->panel1->SuspendLayout();
        this->TabControl1->SuspendLayout();
        this->tabPage2->SuspendLayout();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox7))->BeginInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox6))->BeginInit();

```

```

        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox4))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox1))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox5))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox9))->BeginInit();
        this->SuspendLayout();
        //
        // PictureBox3
        //
        this->PictureBox3->BackColor = System::Drawing::Color::Transparent;
        this->PictureBox3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^ >(resources-
>GetObject(L"PictureBox3.BackgroundImage")));
        this->PictureBox3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->PictureBox3->Cursor = System::Windows::Forms::Cursors::Cross;
        this->PictureBox3->Location = System::Drawing::Point(12, 12);
        this->PictureBox3->Name = L"PictureBox3";
        this->PictureBox3->Size = System::Drawing::Size(49, 49);
        this->PictureBox3->TabIndex = 43;
        this->PictureBox3->TabStop = false;
        //
        // Label10
        //
        this->Label10->AutoSize = true;
        this->Label10->BackColor = System::Drawing::Color::Transparent;
        this->Label10->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->Label10->ForeColor = System::Drawing::Color::Black;
        this->Label10->Location = System::Drawing::Point(67, 29);
        this->Label10->Name = L"Label10";
        this->Label10->Size = System::Drawing::Size(298, 15);
        this->Label10->TabIndex = 44;
        this->Label10->Text = L"Mathematics for Ordinary Level Examination
1.0.0.0\r\n";
        //
        // Button1
        //
        this->Button1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^ >(resources-
>GetObject(L"Button1.BackgroundImage")));
        this->Button1->Cursor = System::Windows::Forms::Cursors::Hand;
        this->Button1->FlatAppearance->BorderColor =
System::Drawing::Color::FromArgb(static_cast<System::Int32>(static_cast<System::Byte>(192
)),
static_cast<System::Int32>(static_cast<System::Byte>(0)),
static_cast<System::Int32>(static_cast<System::Byte>(0)));
        this->Button1->FlatAppearance->BorderSize = 2;
        this->Button1->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->Button1->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->Button1->ForeColor = System::Drawing::Color::Black;
        this->Button1->Location = System::Drawing::Point(565, 376);

```

```

        this->Button1->Name = L"Button1";
        this->Button1->Size = System::Drawing::Size(146, 28);
        this->Button1->TabIndex = 46;
        this->Button1->Text = L"Close";
        this->Button1->UseVisualStyleBackColor = true;
        this->Button1->Click += gcnew System::EventHandler(this,
&about::Button1_Click);
    //
    // TabPage8
    //
    this->TabPage8->BackColor = System::Drawing::Color::Black;
    this->TabPage8->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"TabPage8.BackgroundImage")));
    this->TabPage8->Controls->Add(this->label24);
    this->TabPage8->Controls->Add(this->pictureBox8);
    this->TabPage8->Controls->Add(this->PictureBox2);
    this->TabPage8->Controls->Add(this->Label18);
    this->TabPage8->Controls->Add(this->panel1);
    this->TabPage8->Cursor = System::Windows::Forms::Cursors::Arrow;
    this->TabPage8->Location = System::Drawing::Point(4, 22);
    this->TabPage8->Name = L"TabPage8";
    this->TabPage8->Padding = System::Windows::Forms::Padding(3);
    this->TabPage8->Size = System::Drawing::Size(700, 263);
    this->TabPage8->TabIndex = 1;
    this->TabPage8->Text = L"About";
    //
    // label24
    //
    this->label24->BackColor = System::Drawing::Color::Turquoise;
    this->label24->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label24->ForeColor = System::Drawing::Color::Black;
    this->label24->Location = System::Drawing::Point(565, 165);
    this->label24->Name = L"label24";
    this->label24->Size = System::Drawing::Size(125, 13);
    this->label24->TabIndex = 48;
    this->label24->Text = L"QR Identification";
    this->label24-> TextAlign =
System::Drawing::ContentAlignment::TopCenter;
    //
    // pictureBox8
    //
    this->pictureBox8->BackColor = System::Drawing::Color::Transparent;
    this->pictureBox8->Image = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"pictureBox8.Image")));
    this->pictureBox8->Location = System::Drawing::Point(565, 40);
    this->pictureBox8->Name = L"pictureBox8";
    this->pictureBox8->Size = System::Drawing::Size(125, 126);
    this->pictureBox8->SizeMode =
System::Windows::Forms::PictureBoxSizeMode::StretchImage;
    this->pictureBox8->TabIndex = 43;
    this->pictureBox8->TabStop = false;
    //
    // PictureBox2
    //
    this->PictureBox2->BackColor = System::Drawing::Color::Transparent;

```

```

        this->PictureBox2->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"PictureBox2.Image")));
        this->PictureBox2->Location = System::Drawing::Point(11, 16);
        this->PictureBox2->Name = L"PictureBox2";
        this->PictureBox2->Size = System::Drawing::Size(144, 158);
        this->PictureBox2->SizeMode =
System::Windows::Forms::PictureBoxSizeMode::StretchImage;
        this->PictureBox2->TabIndex = 38;
        this->PictureBox2->TabStop = false;
        //
        // Label8
        //
        this->Label8->BackColor = System::Drawing::Color::Transparent;
        this->Label8->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->Label8->ForeColor = System::Drawing::Color::Black;
        this->Label8->Location = System::Drawing::Point(12, 174);
        this->Label8->Name = L"Label8";
        this->Label8->Size = System::Drawing::Size(142, 85);
        this->Label8->TabIndex = 36;
        this->Label8->Text = L" \" Think not maths as another war to fight
but as a challenge worthy of taking \"\r"
        L"\n- MOLE Creators";
        this->Label8-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // panel1
        //
        this->panel1->AutoScroll = true;
        this->panel1->BackColor = System::Drawing::Color::Transparent;
        this->panel1->Controls->Add(this->pictureBox9);
        this->panel1->Controls->Add(this->linkLabel2);
        this->panel1->Controls->Add(this->label23);
        this->panel1->Controls->Add(this->label22);
        this->panel1->Controls->Add(this->label21);
        this->panel1->Controls->Add(this->label20);
        this->panel1->Controls->Add(this->Label2);
        this->panel1->Location = System::Drawing::Point(161, 29);
        this->panel1->Name = L"panel1";
        this->panel1->Size = System::Drawing::Size(398, 221);
        this->panel1->TabIndex = 45;
        //
        // linkLabel2
        //
        this->linkLabel2->BackColor = System::Drawing::Color::Gold;
        this->linkLabel2->Cursor = System::Windows::Forms::Cursors::Hand;
        this->linkLabel2->Dock = System::Windows::Forms::DockStyle::Bottom;
        this->linkLabel2->Font = (gcnew System::Drawing::Font(L"Arial",
8.25F, System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->linkLabel2->ForeColor = System::Drawing::Color::Black;
        this->linkLabel2->LinkColor = System::Drawing::Color::Black;
        this->linkLabel2->Location = System::Drawing::Point(0, 393);
        this->linkLabel2->Name = L"linkLabel2";
        this->linkLabel2->Size = System::Drawing::Size(381, 13);
        this->linkLabel2->TabIndex = 51;
        this->linkLabel2->TabStop = true;

```

```

        this->linkLabel2->Text = L"http://mole.loomhost.com/about";
        this->linkLabel2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // label23
    //
    this->label23->BackColor = System::Drawing::Color::Transparent;
    this->label23->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label23->ForeColor = System::Drawing::Color::Black;
    this->label23->Location = System::Drawing::Point(2, 208);
    this->label23->Name = L"label23";
    this->label23->Size = System::Drawing::Size(373, 93);
    this->label23->TabIndex = 49;
    this->label23->Text = resources->GetString(L"label23.Text");
//
// label22
//
this->label22->BackColor = System::Drawing::Color::CadetBlue;
this->label22->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label22->ForeColor = System::Drawing::Color::Black;
    this->label22->Location = System::Drawing::Point(0, 183);
    this->label22->Name = L"label22";
    this->label22->Size = System::Drawing::Size(381, 22);
    this->label22->TabIndex = 48;
    this->label22->Text = L"Who Owns MOLE\?";
    this->label22-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// label21
//
this->label21->BackColor = System::Drawing::Color::Gold;
this->label21->Dock = System::Windows::Forms::DockStyle::Bottom;
this->label21->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label21->ForeColor = System::Drawing::Color::Black;
    this->label21->Location = System::Drawing::Point(0, 406);
    this->label21->Name = L"label21";
    this->label21->Size = System::Drawing::Size(381, 13);
    this->label21->TabIndex = 47;
    this->label21->Text = L"More Information";
    this->label21-> TextAlign =
System::Drawing::ContentAlignment::TopCenter;
//
// label20
//
this->label20->BackColor = System::Drawing::Color::CadetBlue;
this->label20->Dock = System::Windows::Forms::DockStyle::Top;
this->label20->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label20->ForeColor = System::Drawing::Color::Black;
    this->label20->Location = System::Drawing::Point(0, 0);
    this->label20->Name = L"label20";

```

```

this->label20->Size = System::Drawing::Size(381, 22);
this->label20->TabIndex = 45;
this->label20->Text = L"MOLE Origins";
this->label20-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// Label2
//
this->Label2->BackColor = System::Drawing::Color::Transparent;
this->Label2->Dock = System::Windows::Forms::DockStyle::Fill;
this->Label2->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label2->ForeColor = System::Drawing::Color::Black;
this->Label2->Location = System::Drawing::Point(0, 0);
this->Label2->Name = L"Label2";
this->Label2->Size = System::Drawing::Size(381, 419);
this->Label2->TabIndex = 43;
this->Label2->Text = resources->GetString(L"Label2.Text");
//
// TabControl2
//
this->TabControl2->Controls->Add(this->TabPage8);
this->TabControl2->Controls->Add(this->tabPage2);
this->TabControl2->Cursor = System::Windows::Forms::Cursors::Hand;
this->TabControl2->Location = System::Drawing::Point(7, 76);
this->TabControl2->Multiline = true;
this->TabControl2->Name = L"TabControl2";
this->TabControl2->SelectedIndex = 0;
this->TabControl2->Size = System::Drawing::Size(708, 289);
this->TabControl2->SizeMode =
System::Windows::Forms::TabSizeMode::Fixed;
this->TabControl2->TabIndex = 45;
//
// tabPage2
//
this->tabPage2->AutoScroll = true;
this->tabPage2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"tabPage2.BackgroundImage")));
this->tabPage2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->tabPage2->Controls->Add(this->pictureBox7);
this->tabPage2->Controls->Add(this->label17);
this->tabPage2->Controls->Add(this->label18);
this->tabPage2->Controls->Add(this->label19);
this->tabPage2->Controls->Add(this->pictureBox6);
this->tabPage2->Controls->Add(this->label9);
this->tabPage2->Controls->Add(this->label12);
this->tabPage2->Controls->Add(this->label16);
this->tabPage2->Controls->Add(this->pictureBox4);
this->tabPage2->Controls->Add(this->label5);
this->tabPage2->Controls->Add(this->label6);
this->tabPage2->Controls->Add(this->label17);
this->tabPage2->Controls->Add(this->pictureBox1);
this->tabPage2->Controls->Add(this->label11);
this->tabPage2->Controls->Add(this->label3);
this->tabPage2->Controls->Add(this->label4);

```

```

        this->tabPage2->Controls->Add(this->PictureBox5);
        this->tabPage2->Controls->Add(this->Label13);
        this->tabPage2->Controls->Add(this->Label14);
        this->tabPage2->Controls->Add(this->Label15);
        this->tabPage2->Location = System::Drawing::Point(4, 22);
        this->tabPage2->Name = L"tabPage2";
        this->tabPage2->Size = System::Drawing::Size(700, 263);
        this->tabPage2->TabIndex = 2;
        this->tabPage2->Text = L"Team";
        this->tabPage2->UseVisualStyleBackColor = true;
    //
    // pictureBox7
    //
    this->pictureBox7->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox7.BackgroundImage")));
    this->pictureBox7->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->pictureBox7->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->pictureBox7->Location = System::Drawing::Point(687, 10);
    this->pictureBox7->Name = L"pictureBox7";
    this->pictureBox7->Size = System::Drawing::Size(130, 110);
    this->pictureBox7->TabIndex = 62;
    this->pictureBox7->TabStop = false;
//
// label17
//
this->label17->AutoSize = true;
this->label17->BackColor = System::Drawing::Color::Transparent;
this->label17->ForeColor = System::Drawing::Color::Black;
this->label17->Location = System::Drawing::Point(818, 72);
this->label17->Name = L"label17";
this->label17->Size = System::Drawing::Size(169, 26);
this->label17->TabIndex = 64;
this->label17->Text = L"Email - amuthupuwath@gmail.com\r\nContact No
- 0758660172";
//
// label18
//
this->label18->BackColor = System::Drawing::Color::LightSeaGreen;
this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label18->ForeColor = System::Drawing::Color::Black;
this->label18->Location = System::Drawing::Point(816, 39);
this->label18->Name = L"label18";
this->label18->Size = System::Drawing::Size(205, 15);
this->label18->TabIndex = 63;
this->label18->Text = L"MOLE Team Member";
this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label19
//
this->label19->AutoSize = true;
this->label19->BackColor = System::Drawing::Color::Transparent;

```

```

        this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label19->ForeColor = System::Drawing::Color::Black;
        this->label19->Location = System::Drawing::Point(818, 56);
        this->label19->Name = L"label19";
        this->label19->Size = System::Drawing::Size(145, 15);
        this->label19->TabIndex = 65;
        this->label19->Text = L"Prasanga Weerasooriya";
        //
        // pictureBox6
        //
        this->pictureBox6->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox6.BackgroundImage")));
        this->pictureBox6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox6->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->pictureBox6->Location = System::Drawing::Point(347, 126);
        this->pictureBox6->Name = L"pictureBox6";
        this->pictureBox6->Size = System::Drawing::Size(130, 110);
        this->pictureBox6->TabIndex = 58;
        this->pictureBox6->TabStop = false;
        //
        // label9
        //
        this->label9->AutoSize = true;
        this->label9->BackColor = System::Drawing::Color::Transparent;
        this->label9->ForeColor = System::Drawing::Color::Black;
        this->label9->Location = System::Drawing::Point(478, 188);
        this->label9->Name = L"label9";
        this->label9->Size = System::Drawing::Size(169, 26);
        this->label9->TabIndex = 60;
        this->label9->Text = L"Email - amuthupuwath@gmail.com\r\nContact No
- 0758660172";
        //
        // label12
        //
        this->label12->BackColor = System::Drawing::Color::LightSeaGreen;
        this->label12->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label12->ForeColor = System::Drawing::Color::Black;
        this->label12->Location = System::Drawing::Point(477, 155);
        this->label12->Name = L"label12";
        this->label12->Size = System::Drawing::Size(205, 15);
        this->label12->TabIndex = 59;
        this->label12->Text = L"MOLE Team Member";
        this->label12-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label16
        //
        this->label16->AutoSize = true;
        this->label16->BackColor = System::Drawing::Color::Transparent;
        this->label16->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));

```

```

        static_cast<System::Byte>(0));
this->label16->ForeColor = System::Drawing::Color::Black;
this->label16->Location = System::Drawing::Point(478, 172);
this->label16->Name = L"label16";
this->label16->Size = System::Drawing::Size(140, 15);
this->label16->TabIndex = 61;
this->label16->Text = L"Punarjeewa Abesekara";
//
// pictureBox
//
this->pictureBox4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox4.BackgroundImage")));
this->pictureBox4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->pictureBox4->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->pictureBox4->Location = System::Drawing::Point(347, 10);
this->pictureBox4->Name = L"pictureBox4";
this->pictureBox4->Size = System::Drawing::Size(130, 110);
this->pictureBox4->TabIndex = 54;
this->pictureBox4->TabStop = false;
//
// label5
//
this->label5->AutoSize = true;
this->label5->BackColor = System::Drawing::Color::Transparent;
this->label5->ForeColor = System::Drawing::Color::Black;
this->label5->Location = System::Drawing::Point(478, 72);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(130, 26);
this->label5->TabIndex = 56;
this->label5->Text = L"Email - narat@gmail.com\r\nContact No -
0758660172";
//
// label6
//
this->label6->BackColor = System::Drawing::Color::LightSeaGreen;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label6->ForeColor = System::Drawing::Color::Black;
this->label6->Location = System::Drawing::Point(476, 39);
this->label6->Name = L"label6";
this->label6->Size = System::Drawing::Size(205, 15);
this->label6->TabIndex = 55;
this->label6->Text = L"MOLE Team Member";
this->label6-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label7
//
this->label7->AutoSize = true;
this->label7->BackColor = System::Drawing::Color::Transparent;
this->label7->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label7->ForeColor = System::Drawing::Color::Black;

```

```

this->label7->Location = System::Drawing::Point(478, 56);
this->label7->Name = L"label7";
this->label7->Size = System::Drawing::Size(99, 15);
this->label7->TabIndex = 57;
this->label7->Text = L"Nipuna Aravinda";
//
// pictureBox1
//
this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
this->pictureBox1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->pictureBox1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->pictureBox1->Location = System::Drawing::Point(7, 126);
this->pictureBox1->Name = L"pictureBox1";
this->pictureBox1->Size = System::Drawing::Size(130, 110);
this->pictureBox1->TabIndex = 50;
this->pictureBox1->TabStop = false;
//
// label1
//
this->label1->AutoSize = true;
this->label1->BackColor = System::Drawing::Color::Transparent;
this->label1->ForeColor = System::Drawing::Color::Black;
this->label1->Location = System::Drawing::Point(138, 188);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(151, 26);
this->label1->TabIndex = 52;
this->label1->Text = L"Email - svissuddha@ymail.com\r\nContact No -
0758660172";
//
// label3
//
this->label3->BackColor = System::Drawing::Color::LightSeaGreen;
this->label3->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label3->ForeColor = System::Drawing::Color::Black;
this->label3->Location = System::Drawing::Point(136, 155);
this->label3->Name = L"label3";
this->label3->Size = System::Drawing::Size(205, 15);
this->label3->TabIndex = 51;
this->label3->Text = L"MOLE Team Member";
this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label4
//
this->label4->AutoSize = true;
this->label4->BackColor = System::Drawing::Color::Transparent;
this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label4->ForeColor = System::Drawing::Color::Black;
this->label4->Location = System::Drawing::Point(138, 172);
this->label4->Name = L"label4";

```

```

        this->label4->Size = System::Drawing::Size(148, 15);
        this->label4->TabIndex = 53;
        this->label4->Text = L"Visuddha Samarasekara";
    //
    // PictureBox5
    //
    this->PictureBox5->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"PictureBox5.BackgroundImage")));
    this->PictureBox5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->PictureBox5->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->PictureBox5->Location = System::Drawing::Point(7, 10);
    this->PictureBox5->Name = L"PictureBox5";
    this->PictureBox5->Size = System::Drawing::Size(130, 110);
    this->PictureBox5->TabIndex = 46;
    this->PictureBox5->TabStop = false;
//
// Label13
//
this->Label13->AutoSize = true;
this->Label13->BackColor = System::Drawing::Color::Transparent;
this->Label13->ForeColor = System::Drawing::Color::Black;
this->Label13->Location = System::Drawing::Point(138, 72);
this->Label13->Name = L"Label13";
this->Label13->Size = System::Drawing::Size(169, 26);
this->Label13->TabIndex = 48;
this->Label13->Text = L"Email - amuthupuwath@gmail.com\r\nContact No
- 0758660172";
//
// Label14
//
this->Label14->BackColor = System::Drawing::Color::Gold;
this->Label14->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->Label14->ForeColor = System::Drawing::Color::Black;
this->Label14->Location = System::Drawing::Point(136, 39);
this->Label14->Name = L"Label14";
this->Label14->Size = System::Drawing::Size(205, 15);
this->Label14->TabIndex = 47;
this->Label14->Text = L"MOLE Team Leader";
this->Label14-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// Label15
//
this->Label15->AutoSize = true;
this->Label15->BackColor = System::Drawing::Color::Transparent;
this->Label15->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->Label15->ForeColor = System::Drawing::Color::Black;
this->Label15->Location = System::Drawing::Point(138, 56);
this->Label15->Name = L"Label15";
this->Label15->Size = System::Drawing::Size(111, 15);
this->Label15->TabIndex = 49;

```

```

        this->Label15->Text = L"Basura Ratnayake";
    //
    // linkLabel1
    //
    this->linkLabel1->AutoSize = true;
    this->linkLabel1->BackColor = System::Drawing::Color::Transparent;
    this->linkLabel1->Cursor = System::Windows::Forms::Cursors::Hand;
    this->linkLabel1->Font = (gcnew System::Drawing::Font(L"Arial",
8.25F, System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->linkLabel1->ForeColor = System::Drawing::Color::Black;
    this->linkLabel1->LinkColor = System::Drawing::Color::Black;
    this->linkLabel1->Location = System::Drawing::Point(145, 389);
    this->linkLabel1->Name = L"linkLabel1";
    this->linkLabel1->Size = System::Drawing::Size(157, 14);
    this->linkLabel1->TabIndex = 45;
    this->linkLabel1->TabStop = true;
    this->linkLabel1->Text = L"http://www.mole.loomhost.com";
    //
    // Label11
    //
    this->Label11->BackColor = System::Drawing::Color::Transparent;
    this->Label11->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->Label11->ForeColor = System::Drawing::Color::Black;
    this->Label11->Location = System::Drawing::Point(11, 376);
    this->Label11->Name = L"Label11";
    this->Label11->Size = System::Drawing::Size(398, 31);
    this->Label11->TabIndex = 44;
    this->Label11->Text = L"Copyright © 2013 MOLE team, All Rights
Reserved.\r\nnamuthupuwath@gmail.com, \r\n\r\n\r\n\r\n";
    //
    // button2
    //
    this->button2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"button2.BackgroundImage")));
    this->button2->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button2->FlatAppearance->BorderColor =
System::Drawing::Color::FromArgb(static_cast<System::Int32>(static_cast<System::Byte>(192
)),
    static_cast<System::Int32>(static_cast<System::Byte>(0)),
static_cast<System::Int32>(static_cast<System::Byte>(0)));
    this->button2->FlatAppearance->BorderSize = 2;
    this->button2->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
    this->button2->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->button2->ForeColor = System::Drawing::Color::Black;
    this->button2->Location = System::Drawing::Point(550, 21);
    this->button2->Name = L"button2";
    this->button2->Size = System::Drawing::Size(158, 32);
    this->button2->TabIndex = 47;
    this->button2->Text = L"How to use MOLE\? (F1)";
    this->button2->UseVisualStyleBackColor = true;
    //
    // label25

```

```

// 
this->label25->BackColor = System::Drawing::Color::Transparent;
this->label25->ForeColor = System::Drawing::Color::Black;
this->label25->Location = System::Drawing::Point(550, 54);
this->label25->Name = L"label25";
this->label25->Size = System::Drawing::Size(161, 26);
this->label25->TabIndex = 57;
this->label25->Text = L"Learn how to use MOLE for its full extent";
this->label25-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
// 
// pictureBox9
// 
this->pictureBox9->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox9.BackgroundImage")));
this->pictureBox9->Location = System::Drawing::Point(50, 302);
this->pictureBox9->Name = L"pictureBox9";
this->pictureBox9->Size = System::Drawing::Size(273, 91);
this->pictureBox9->TabIndex = 52;
this->pictureBox9->TabStop = false;
// 
// about
// 
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"$this.BackgroundImage")));
this->ClientSize = System::Drawing::Size(721, 417);
this->Controls->Add(this->label25);
this->Controls->Add(this->button2);
this->Controls->Add(this->linkLabel1);
this->Controls->Add(this->Button1);
this->Controls->Add(this->TabControl2);
this->Controls->Add(this->Label11);
this->Controls->Add(this->PictureBox3);
this->Controls->Add(this->Label10);
this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
this->MaximizeBox = false;
this->MinimizeBox = false;
this->Name = L"about";
this->ShowIcon = false;
this->ShowInTaskbar = false;
this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
this->Text = L"About MOLE";
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox3))->EndInit();
this->TabPage8->ResumeLayout(false);
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox8))->EndInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox2))->EndInit();
this->panel1->ResumeLayout(false);
this->TabControl2->ResumeLayout(false);
this->tabPage2->ResumeLayout(false);

```

```

        this->tabPage2->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox7))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox6))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox4))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox1))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox5))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox9))->EndInit();
        this->ResumeLayout(false);
        this->PerformLayout();

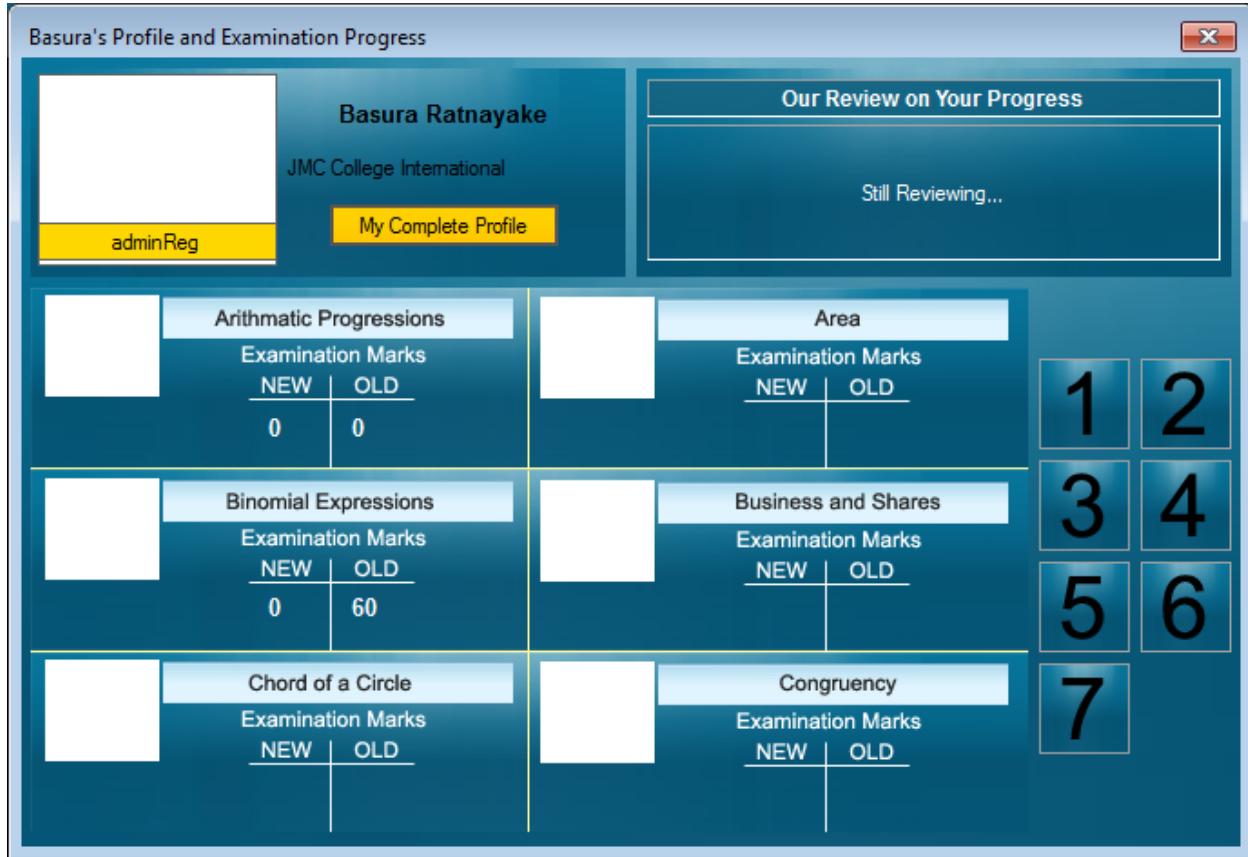
    }
#pragma endregion
    private: System::Void Button1_Click(System::Object^ sender, System::EventArgs^
e) {
        this->Hide();
    }
private: System::Void Label2_Click(System::Object^ sender, System::EventArgs^ e) {
}

private: System::Void linkLabel1_LinkClicked(System::Object^ sender,
System::Windows::Forms::LinkLabelLinkClickedEventArgs^ e) {
    try{
        System::Diagnostics::Process::Start("http://mole.loomhost.com");
    }catch (Exception^ ex){
        MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
    }
}
private: System::Void linkLabel2_LinkClicked(System::Object^ sender,
System::Windows::Forms::LinkLabelLinkClickedEventArgs^ e) {
    try{
        System::Diagnostics::Process::Start("http://mole.loomhost.com/about");
    }catch (Exception^ ex){
        MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
    }
}
};

}

```

v. My Profile



1. myP.cpp

```
#include "myP.h"
```

2. myP.h

```
#pragma once
#include "CoreControls.h"

namespace MOLE {

    using namespace System::IO;
    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;

    /// <summary>
    /// Summary for myP
    /// </summary>
    public ref class myP : public System::Windows::Forms::Form
```

```

{
public:
    Core C;
    myP(void)
    {
        InitializeComponent();
        try{
            C.doShow("D", "details.ms");
            StreamReader^ details = gcnew
StreamReader(Application::ExecutablePath->Replace("MOLE.exe","user\\details.ms"));
            String^ fname=details->ReadLine()->Substring(8);
            String^ lname=details->ReadLine()->Substring(7);
            String^ sname=details->ReadLine()->Substring(3);
            sname = details->ReadLine()->Substring(9);
            this->Text=fname + "'s Profile and Examination Progress";
            school->Text=sname;
            name->Text=fname + " " +lname;
            details->Close();
            C.doShow("E", "details.ms");
            C.doShow("D", "log.ms");
            StreamReader^ log = gcnew StreamReader(Application::ExecutablePath-
>Replace("MOLE.exe","user\\log.ms"));
            String^ user=log->ReadLine()->Substring(11);
            usern->Text=user;
            log->Close();
            C.doShow("E", "log.ms");
            C.doShow("D", "exams.ms");
            getData();
        }catch(Exception^e){
            MessageBox::Show("We Encountered a Problem. " + e->Message + "
Try reinstalling the Application");
        }
    }

    void showE(Panel^ p){
        p->Size = System::Drawing::Size(550,300);
        p->Location = System::Drawing::Point(5,127);
        p->Visible = true;
        p->BringToFront();
    } //Shows the Exam Panels
private: System::Windows::Forms::Label^ ptNew;
public:
private: System::Windows::Forms::Label^ ptOld;
private: System::Windows::Forms::Label^ rnNew;
private: System::Windows::Forms::Label^ rnOld;

public:

public:

public:

    StreamReader^ examD;
void getData(){
    examD = gcnew StreamReader(Application::ExecutablePath-
>Replace("MOLE.exe","user\\exams.ms"));
}

```

```

        int count = System::Convert::ToInt16(examD->ReadLine()-
>Substring(5)) + System::Convert::ToInt16(examD->ReadLine()->Substring(5));
        String^ name;
        while(count !=0){
            name = examD->ReadLine()->Substring(7);
            examIdentify(name);
            count --;
        }
        examD->Close();
        C.doShow("E", "exams.ms");
    }
    void examIdentify(String^ name){
        name=name->ToLower();
        if(name == "ap"){
            setValue(apNew,apOld);
        }else if(name == "a"){
            setValue(aNew,aOld);
        }else if(name == "be"){
            setValue(binoNew,binoOld);
        }else if(name == "bas"){
            setValue(bisNew,bisOld);
        }else if(name == "coc"){
            setValue(cocNew,cocOld);
        }else if(name == "con"){
            setValue(conNew,conOld);
        }else if(name == "cocir"){
            setValue(conCircleNew,conCircleOld);
        }else if(name == "cons"){
            setValue(construNew,construOld);
        }else if(name == "cq"){
            setValue(cqNew,cqOld);
        }else if(name == "cy"){
            setValue(cylindersNew,cylinderOld);
        }else if(name == "eat"){
            setValue(eatNew,eatOld);
        }else if(name == "fra"){
            setValue(fNew,fOld);
        }else if(name == "fd"){
            setValue(fdNew,fdOld);
        }else if(name == "gp"){
            setValue(gpNew, gpOld);
        }else if(name == "g"){
            setValue(gNew,gOld);
        }else if(name == "il"){
            setValue(ilNew,ilOld);
        }else if(name == "ie"){
            setValue(ieNew,ieOld);
        }else if(name == "ai"){
            setValue(aiNew,aiOld);
        }else if(name == "ri"){
            setValue(riNew,riOld);
        }else if(name == "lcm"){
            setValue(lcmNew,lcmOld);
        }else if(name == "l"){
            setValue(lNew,lOld);
        }else if(name == "m"){
            setValue(mNew,mOld);
        }else if(name == "mpt"){

```

```

                setValue(mptNew,mptOld);
}else if(name == "nb"){
    setValue(nbNew,nbOld);
}else if(name == "p"){
    setValue(paraNew,paraOld);
}else if(name == "per"){
    setValue(perNew,perOld);
}else if(name == "peri"){
    setValue(pNew,pOld);
}else if(name == "pro"){
    setValue(proNew,proOld);
}else if(name == "pt"){
    setValue(ptNew,ptOld);
}else if(name == "r"){
    setValue(rNew,rOld);
}else if(name == "rn"){
    setValue(ratNew,ratOld);
}else if(name == "s"){
    setValue(sNew,sOld);
}else if(name == "rd"){
    setValue(rdNew,rdOld);
}else if(name == "sp"){
    setValue(spNew,spOld);
}else if(name == "sr"){
    setValue(srNew,srOld);
}else if(name == "sas"){
    setValue(sasNew,sasOld);
}else if(name == "ren"){
    setValue(rNew,rOld);
}else if(name == "ta"){
    setValue(taNew,taOld);
}else if(name == "ti"){
    setValue(tiNew,tiOld);
}else if(name == "tri"){
    setValue(trNew,trOld);
}else if(name == "tria"){
    setValue(tNew,tOld);
}else if(name == "vs"){
    setValue(vsNew,vsOld);
}
} //A Set of If Statements to Print Marks
void setValue(Label^ a, Label^ b){
    String^ field;
    field = examD->ReadLine()->Substring(8);
    a->Text = field;
    field = examD->ReadLine()->Substring(8);
    b->Text = field;
    field = examD->ReadLine()->Substring(9);
}
protected:
/// <summary>
/// Clean up any resources being used.
/// </summary>
~myP()
{
    if (components)
    {
        delete components;
}

```

```
        }

private: System::Windows::Forms::Panel^ panel1;
private: System::Windows::Forms::Label^ name;
private: System::Windows::Forms::Label^ school;
protected:

private: System::Windows::Forms::Button^ vProfile;
private: System::Windows::Forms::Label^ usern;

private: System::Windows::Forms::Panel^ panel3;

private: System::Windows::Forms::Label^ label6;
private: System::Windows::Forms::Label^ review;

private: System::Windows::Forms::Panel^ myPic;

private: System::Windows::Forms::Panel^ eP1;
private: System::Windows::Forms::Button^ e1;
private: System::Windows::Forms::Button^ e2;
private: System::Windows::Forms::Button^ e4;

private: System::Windows::Forms::Button^ e3;
private: System::Windows::Forms::Button^ e6;

private: System::Windows::Forms::Button^ e5;
private: System::Windows::Forms::Button^ e7;
private: System::Windows::Forms::Label^ conNew;
private: System::Windows::Forms::Label^ conOld;

private: System::Windows::Forms::Label^ bisNew;
private: System::Windows::Forms::Label^ bisOld;

private: System::Windows::Forms::Label^ aNew;
private: System::Windows::Forms::Label^ aOld;

private: System::Windows::Forms::Label^ cocNew;
private: System::Windows::Forms::Label^ cocOld;

private: System::Windows::Forms::Label^ binoNew;
private: System::Windows::Forms::Label^ binoOld;
```

```

private: System::Windows::Forms::Label^ apNew;
private: System::Windows::Forms::Label^ apOld;
private: System::Windows::Forms::Panel^ eP2;
private: System::Windows::Forms::Label^ fNew;
private: System::Windows::Forms::Label^ fOld;

private: System::Windows::Forms::Label^ cylindersNew;
private: System::Windows::Forms::Label^ cylinderOld;

private: System::Windows::Forms::Label^ construNew;
private: System::Windows::Forms::Label^ construOld;

private: System::Windows::Forms::Label^ eatNew;
private: System::Windows::Forms::Label^ eatOld;

private: System::Windows::Forms::Label^ cqNew;
private: System::Windows::Forms::Label^ cqOld;

private: System::Windows::Forms::Label^ conCircleNew;
private: System::Windows::Forms::Label^ conCircleOld;
private: System::Windows::Forms::Panel^ eP3;
private: System::Windows::Forms::Label^ aiNew;
private: System::Windows::Forms::Label^ aiOld;

private: System::Windows::Forms::Label^ ilNew;
private: System::Windows::Forms::Label^ ilOld;

private: System::Windows::Forms::Label^ gpNew;
private: System::Windows::Forms::Label^ gpOld;

private: System::Windows::Forms::Label^ ieNew;
private: System::Windows::Forms::Label^ ieOld;

private: System::Windows::Forms::Label^ gNew;
private: System::Windows::Forms::Label^ gOld;

private: System::Windows::Forms::Label^ fdNew;
private: System::Windows::Forms::Label^ fdOld;
private: System::Windows::Forms::Panel^ eP4;
private: System::Windows::Forms::Label^ nbNew;
private: System::Windows::Forms::Label^ nbOld;

```

```
private: System::Windows::Forms::Label^ mNew;
private: System::Windows::Forms::Label^ mOld;

private: System::Windows::Forms::Label^ lcmNew;
private: System::Windows::Forms::Label^ lcmOld;

private: System::Windows::Forms::Label^ mptNew;
private: System::Windows::Forms::Label^ mptOld;

private: System::Windows::Forms::Label^ lNew;
private: System::Windows::Forms::Label^ lOld;

private: System::Windows::Forms::Label^ riNew;
private: System::Windows::Forms::Label^ riOld;
private: System::Windows::Forms::Panel^ eP5;
private: System::Windows::Forms::Label^ ratNew;
private: System::Windows::Forms::Label^ ratOld;

private: System::Windows::Forms::Label^ proNew;
private: System::Windows::Forms::Label^ proOld;

private: System::Windows::Forms::Label^ perNew;
private: System::Windows::Forms::Label^ perOld;

private: System::Windows::Forms::Label^ rNew;
private: System::Windows::Forms::Label^ rOld;

private: System::Windows::Forms::Label^ pNew;
private: System::Windows::Forms::Label^ pOld;

private: System::Windows::Forms::Label^ paraNew;
private: System::Windows::Forms::Label^ paraOld;

private: System::Windows::Forms::Panel^ eP6;
private: System::Windows::Forms::Label^ sasNew;
private: System::Windows::Forms::Label^ sasOld;

private: System::Windows::Forms::Label^ rdNew;
private: System::Windows::Forms::Label^ rdOld;

private: System::Windows::Forms::Label^ srNew;
private: System::Windows::Forms::Label^ srOld;
```

```

private: System::Windows::Forms::Label^ spNew;
private: System::Windows::Forms::Label^ spOld;

private: System::Windows::Forms::Label^ sNew;
private: System::Windows::Forms::Label^ sOld;
private: System::Windows::Forms::Panel^ eP7;
private: System::Windows::Forms::Label^ vsNew;
private: System::Windows::Forms::Label^ vsOld;

private: System::Windows::Forms::Label^ trNew;
private: System::Windows::Forms::Label^ trOld;

private: System::Windows::Forms::Label^ taNew;
private: System::Windows::Forms::Label^ taOld;

private: System::Windows::Forms::Label^ tNew;
private: System::Windows::Forms::Label^ tOld;

private: System::Windows::Forms::Label^ tiNew;
private: System::Windows::Forms::Label^ tiOld;

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
    System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(myP::typeid));
        this->panel1 = (gcnew System::Windows::Forms::Panel());
        this->vProfile = (gcnew System::Windows::Forms::Button());
        this->school = (gcnew System::Windows::Forms::Label());
        this->name = (gcnew System::Windows::Forms::Label());
        this->myPic = (gcnew System::Windows::Forms::Panel());
        this->usern = (gcnew System::Windows::Forms::Label());
        this->panel3 = (gcnew System::Windows::Forms::Panel());
        this->label6 = (gcnew System::Windows::Forms::Label());
        this->review = (gcnew System::Windows::Forms::Label());
        this->eP1 = (gcnew System::Windows::Forms::Panel());
        this->conNew = (gcnew System::Windows::Forms::Label());
        this->conOld = (gcnew System::Windows::Forms::Label());
        this->bisNew = (gcnew System::Windows::Forms::Label());
        this->bisOld = (gcnew System::Windows::Forms::Label());
        this->aNew = (gcnew System::Windows::Forms::Label());
        this->aOld = (gcnew System::Windows::Forms::Label());
    }

```

```

this->cocNew = (gcnew System::Windows::Forms::Label());
this->cocOld = (gcnew System::Windows::Forms::Label());
this->binoNew = (gcnew System::Windows::Forms::Label());
this->binoOld = (gcnew System::Windows::Forms::Label());
this->apNew = (gcnew System::Windows::Forms::Label());
this->apOld = (gcnew System::Windows::Forms::Label());
this->e1 = (gcnew System::Windows::Forms::Button());
this->e2 = (gcnew System::Windows::Forms::Button());
this->e4 = (gcnew System::Windows::Forms::Button());
this->e3 = (gcnew System::Windows::Forms::Button());
this->e6 = (gcnew System::Windows::Forms::Button());
this->e5 = (gcnew System::Windows::Forms::Button());
this->e7 = (gcnew System::Windows::Forms::Button());
this->eP2 = (gcnew System::Windows::Forms::Panel());
this->fNew = (gcnew System::Windows::Forms::Label());
this->fOld = (gcnew System::Windows::Forms::Label());
this->cylindersNew = (gcnew System::Windows::Forms::Label());
this->cylinderOld = (gcnew System::Windows::Forms::Label());
this->construNew = (gcnew System::Windows::Forms::Label());
this->construOld = (gcnew System::Windows::Forms::Label());
this->eatNew = (gcnew System::Windows::Forms::Label());
this->eatOld = (gcnew System::Windows::Forms::Label());
this->cqNew = (gcnew System::Windows::Forms::Label());
this->cqOld = (gcnew System::Windows::Forms::Label());
this->conCircleNew = (gcnew System::Windows::Forms::Label());
this->conCircleOld = (gcnew System::Windows::Forms::Label());
this->eP3 = (gcnew System::Windows::Forms::Panel());
this->aiNew = (gcnew System::Windows::Forms::Label());
this->aiOld = (gcnew System::Windows::Forms::Label());
this->ilNew = (gcnew System::Windows::Forms::Label());
this->ilOld = (gcnew System::Windows::Forms::Label());
this->gpNew = (gcnew System::Windows::Forms::Label());
this->gpOld = (gcnew System::Windows::Forms::Label());
this->ieNew = (gcnew System::Windows::Forms::Label());
this->ieOld = (gcnew System::Windows::Forms::Label());
this->gNew = (gcnew System::Windows::Forms::Label());
this->gOld = (gcnew System::Windows::Forms::Label());
this->fdNew = (gcnew System::Windows::Forms::Label());
this->fdOld = (gcnew System::Windows::Forms::Label());
this->eP4 = (gcnew System::Windows::Forms::Panel());
this->nbNew = (gcnew System::Windows::Forms::Label());
this->nbOld = (gcnew System::Windows::Forms::Label());
this->mNew = (gcnew System::Windows::Forms::Label());
this->mOld = (gcnew System::Windows::Forms::Label());
this->lcmNew = (gcnew System::Windows::Forms::Label());
this->lcmOld = (gcnew System::Windows::Forms::Label());
this->mptNew = (gcnew System::Windows::Forms::Label());
this->mptOld = (gcnew System::Windows::Forms::Label());
this->lNew = (gcnew System::Windows::Forms::Label());
this->lOld = (gcnew System::Windows::Forms::Label());
this->riNew = (gcnew System::Windows::Forms::Label());
this->riOld = (gcnew System::Windows::Forms::Label());
this->eP5 = (gcnew System::Windows::Forms::Panel());
this->ratNew = (gcnew System::Windows::Forms::Label());
this->ratOld = (gcnew System::Windows::Forms::Label());
this->proNew = (gcnew System::Windows::Forms::Label());
this->proOld = (gcnew System::Windows::Forms::Label());
this->perNew = (gcnew System::Windows::Forms::Label());

```

```

this->perOld = (gcnew System::Windows::Forms::Label());
this->rNew = (gcnew System::Windows::Forms::Label());
this->rOld = (gcnew System::Windows::Forms::Label());
this->pNew = (gcnew System::Windows::Forms::Label());
this->pOld = (gcnew System::Windows::Forms::Label());
this->paraNew = (gcnew System::Windows::Forms::Label());
this->paraOld = (gcnew System::Windows::Forms::Label());
this->eP6 = (gcnew System::Windows::Forms::Panel());
this->sasNew = (gcnew System::Windows::Forms::Label());
this->sasOld = (gcnew System::Windows::Forms::Label());
this->ptNew = (gcnew System::Windows::Forms::Label());
this->ptOld = (gcnew System::Windows::Forms::Label());
this->rdNew = (gcnew System::Windows::Forms::Label());
this->rdOld = (gcnew System::Windows::Forms::Label());
this->srNew = (gcnew System::Windows::Forms::Label());
this->srOld = (gcnew System::Windows::Forms::Label());
this->spNew = (gcnew System::Windows::Forms::Label());
this->spOld = (gcnew System::Windows::Forms::Label());
this->sNew = (gcnew System::Windows::Forms::Label());
this->sOld = (gcnew System::Windows::Forms::Label());
this->eP7 = (gcnew System::Windows::Forms::Panel());
this->rnOld = (gcnew System::Windows::Forms::Label());
this->vsNew = (gcnew System::Windows::Forms::Label());
this->vsOld = (gcnew System::Windows::Forms::Label());
this->trNew = (gcnew System::Windows::Forms::Label());
this->trOld = (gcnew System::Windows::Forms::Label());
this->taNew = (gcnew System::Windows::Forms::Label());
this->taOld = (gcnew System::Windows::Forms::Label());
this->tNew = (gcnew System::Windows::Forms::Label());
this->tOld = (gcnew System::Windows::Forms::Label());
this->tiNew = (gcnew System::Windows::Forms::Label());
this->tiOld = (gcnew System::Windows::Forms::Label());
this->rnNew = (gcnew System::Windows::Forms::Label());
this->panel1->SuspendLayout();
this->myPic->SuspendLayout();
this->panel3->SuspendLayout();
this->eP1->SuspendLayout();
this->eP2->SuspendLayout();
this->eP3->SuspendLayout();
this->eP4->SuspendLayout();
this->eP5->SuspendLayout();
this->eP6->SuspendLayout();
this->eP7->SuspendLayout();
this->SuspendLayout();
// 
// panel1
// 
this->panel1->BackColor = System::Drawing::Color::Transparent;
this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
this->panel1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->panel1->Controls->Add(this->vProfile);
this->panel1->Controls->Add(this->school);
this->panel1->Controls->Add(this->name);
this->panel1->Controls->Add(this->myPic);
this->panel1->Location = System::Drawing::Point(5, 6);

```

```

        this->panel1->Name = L"panel1";
        this->panel1->Size = System::Drawing::Size(328, 115);
        this->panel1->TabIndex = 0;
        //
        // vProfile
        //
        this->vProfile->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"vProfile.BackgroundImage")));
        this->vProfile->Cursor = System::Windows::Forms::Cursors::Hand;
        this->vProfile->FlatStyle =
System::Windows::Forms::FlatStyle::Popup;
        this->vProfile->ForeColor = System::Drawing::Color::Black;
        this->vProfile->Location = System::Drawing::Point(165, 75);
        this->vProfile->Name = L"vProfile";
        this->vProfile->Size = System::Drawing::Size(126, 23);
        this->vProfile->TabIndex = 3;
        this->vProfile->Text = L"My Complete Profile";
        this->vProfile->UseVisualStyleBackColor = true;
        this->vProfile->Click += gcnew System::EventHandler(this,
&myP::vProfile_Click);
        //
        // school
        //
        this->school->ForeColor = System::Drawing::Color::Black;
        this->school->Location = System::Drawing::Point(139, 48);
        this->school->Name = L"school";
        this->school->Size = System::Drawing::Size(183, 13);
        this->school->TabIndex = 2;
        this->school->Text = L"ional";
        this->school-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // name
        //
        this->name->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->name->ForeColor = System::Drawing::Color::Black;
        this->name->Location = System::Drawing::Point(139, 6);
        this->name->Name = L"name";
        this->name->Size = System::Drawing::Size(180, 38);
        this->name->TabIndex = 1;
        this->name->Text = L"Kahada Basura Namal Bandara Ratnayake";
        this->name-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // myPic
        //
        this->myPic->BackColor = System::Drawing::Color::White;
        this->myPic->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->myPic->Controls->Add(this->usern);
        this->myPic->Location = System::Drawing::Point(4, 3);
        this->myPic->Name = L"myPic";
        this->myPic->Size = System::Drawing::Size(132, 106);
        this->myPic->TabIndex = 0;
        //

```

```

// usern
//
this->usern->BackColor = System::Drawing::Color::Gold;
this->usern->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->usern->ForeColor = System::Drawing::Color::Black;
this->usern->Location = System::Drawing::Point(-1, 81);
this->usern->Name = L"usern";
this->usern->Size = System::Drawing::Size(132, 21);
this->usern->TabIndex = 3;
this->usern-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel3
//
this->panel3->BackColor = System::Drawing::Color::Transparent;
this->panel3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel3.BackgroundImage")));
this->panel3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->panel3->Controls->Add(this->label6);
this->panel3->Controls->Add(this->review);
this->panel3->ForeColor = System::Drawing::Color::Black;
this->panel3->Location = System::Drawing::Point(339, 6);
this->panel3->Name = L"panel3";
this->panel3->Size = System::Drawing::Size(328, 115);
this->panel3->TabIndex = 4;
//
// label6
//
this->label6->BackColor = System::Drawing::Color::Gold;
this->label6->BorderStyle =
System::Windows::Forms::BorderStyle::Fixed3D;
this->label6->Cursor = System::Windows::Forms::Cursors::Hand;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label6->ForeColor = System::Drawing::Color::White;
this->label6->Image = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"label6.Image")));
this->label6->Location = System::Drawing::Point(6, 6);
this->label6->Name = L"label6";
this->label6->RightToLeft = System::Windows::Forms::RightToLeft::No;
this->label6->Size = System::Drawing::Size(316, 21);
this->label6->TabIndex = 3;
this->label6->Text = L"Our Review on Your Progress";
this->label6-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// review
//
this->review->BorderStyle =
System::Windows::Forms::BorderStyle::Fixed3D;
this->review->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->review->ForeColor = System::Drawing::Color::White;
this->review->Location = System::Drawing::Point(6, 31);
this->review->Name = L"review";

```

```

        this->review->Size = System::Drawing::Size(316, 75);
        this->review->TabIndex = 1;
        this->review->Text = L"Still Reviewing,,,";
        this->review-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // eP1
        //
        this->eP1->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"eP1.BackgroundImage")));
        this->eP1->Controls->Add(this->conNew);
        this->eP1->Controls->Add(this->conOld);
        this->eP1->Controls->Add(this->bisNew);
        this->eP1->Controls->Add(this->bisOld);
        this->eP1->Controls->Add(this->aNew);
        this->eP1->Controls->Add(this->aOld);
        this->eP1->Controls->Add(this->cocNew);
        this->eP1->Controls->Add(this->cocOld);
        this->eP1->Controls->Add(this->binoNew);
        this->eP1->Controls->Add(this->binoOld);
        this->eP1->Controls->Add(this->apNew);
        this->eP1->Controls->Add(this->apOld);
        this->eP1->Location = System::Drawing::Point(5, 127);
        this->eP1->Name = L"eP1";
        this->eP1->Size = System::Drawing::Size(68, 50);
        this->eP1->TabIndex = 0;
        //
        // conNew
        //
        this->conNew->AutoSize = true;
        this->conNew->BackColor = System::Drawing::Color::Transparent;
        this->conNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->conNew->ForeColor = System::Drawing::Color::White;
        this->conNew->Location = System::Drawing::Point(400, 269);
        this->conNew->Name = L"conNew";
        this->conNew->Size = System::Drawing::Size(0, 16);
        this->conNew->TabIndex = 12;
        //
        // conOld
        //
        this->conOld->AutoSize = true;
        this->conOld->BackColor = System::Drawing::Color::Transparent;
        this->conOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->conOld->ForeColor = System::Drawing::Color::White;
        this->conOld->Location = System::Drawing::Point(446, 269);
        this->conOld->Name = L"conOld";
        this->conOld->Size = System::Drawing::Size(0, 16);
        this->conOld->TabIndex = 11;
        //
        // bisNew
        //
        this->bisNew->AutoSize = true;
        this->bisNew->BackColor = System::Drawing::Color::Transparent;

```

```

        this->bisNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->bisNew->ForeColor = System::Drawing::Color::White;
        this->bisNew->Location = System::Drawing::Point(400, 168);
        this->bisNew->Name = L"bisNew";
        this->bisNew->Size = System::Drawing::Size(0, 16);
        this->bisNew->TabIndex = 10;
        //
        // bisOld
        //
        this->bisOld->AutoSize = true;
        this->bisOld->BackColor = System::Drawing::Color::Transparent;
        this->bisOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->bisOld->ForeColor = System::Drawing::Color::White;
        this->bisOld->Location = System::Drawing::Point(446, 168);
        this->bisOld->Name = L"bisOld";
        this->bisOld->Size = System::Drawing::Size(0, 16);
        this->bisOld->TabIndex = 9;
        //
        // aNew
        //
        this->aNew->AutoSize = true;
        this->aNew->BackColor = System::Drawing::Color::Transparent;
        this->aNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->aNew->ForeColor = System::Drawing::Color::White;
        this->aNew->Location = System::Drawing::Point(400, 69);
        this->aNew->Name = L"aNew";
        this->aNew->Size = System::Drawing::Size(0, 16);
        this->aNew->TabIndex = 8;
        //
        // aOld
        //
        this->aOld->AutoSize = true;
        this->aOld->BackColor = System::Drawing::Color::Transparent;
        this->aOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->aOld->ForeColor = System::Drawing::Color::White;
        this->aOld->Location = System::Drawing::Point(446, 69);
        this->aOld->Name = L"aOld";
        this->aOld->Size = System::Drawing::Size(0, 16);
        this->aOld->TabIndex = 7;
        //
        // cocNew
        //
        this->cocNew->AutoSize = true;
        this->cocNew->BackColor = System::Drawing::Color::Transparent;
        this->cocNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->cocNew->ForeColor = System::Drawing::Color::White;
        this->cocNew->Location = System::Drawing::Point(128, 269);
        this->cocNew->Name = L"cocNew";

```

```

this->cocNew->Size = System::Drawing::Size(0, 16);
this->cocNew->TabIndex = 6;
//
// cocOld
//
this->cocOld->AutoSize = true;
this->cocOld->BackColor = System::Drawing::Color::Transparent;
this->cocOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->cocOld->ForeColor = System::Drawing::Color::White;
this->cocOld->Location = System::Drawing::Point(174, 269);
this->cocOld->Name = L"cocOld";
this->cocOld->Size = System::Drawing::Size(0, 16);
this->cocOld->TabIndex = 5;
//
// binoNew
//
this->binoNew->AutoSize = true;
this->binoNew->BackColor = System::Drawing::Color::Transparent;
this->binoNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->binoNew->ForeColor = System::Drawing::Color::White;
this->binoNew->Location = System::Drawing::Point(128, 168);
this->binoNew->Name = L"binoNew";
this->binoNew->Size = System::Drawing::Size(0, 16);
this->binoNew->TabIndex = 4;
//
// binoOld
//
this->binoOld->AutoSize = true;
this->binoOld->BackColor = System::Drawing::Color::Transparent;
this->binoOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->binoOld->ForeColor = System::Drawing::Color::White;
this->binoOld->Location = System::Drawing::Point(174, 168);
this->binoOld->Name = L"binoOld";
this->binoOld->Size = System::Drawing::Size(0, 16);
this->binoOld->TabIndex = 3;
//
// apNew
//
this->apNew->AutoSize = true;
this->apNew->BackColor = System::Drawing::Color::Transparent;
this->apNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->apNew->ForeColor = System::Drawing::Color::White;
this->apNew->Location = System::Drawing::Point(128, 69);
this->apNew->Name = L"apNew";
this->apNew->Size = System::Drawing::Size(0, 16);
this->apNew->TabIndex = 2;
//
// apOld
//
this->apOld->AutoSize = true;

```

```

this->apOld->BackColor = System::Drawing::Color::Transparent;
this->apOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->apOld->ForeColor = System::Drawing::Color::White;
this->apOld->Location = System::Drawing::Point(174, 69);
this->apOld->Name = L"apOld";
this->apOld->Size = System::Drawing::Size(0, 16);
this->apOld->TabIndex = 1;
//
// e1
//
this->e1->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"e1.BackgroundImage")));
this->e1->Cursor = System::Windows::Forms::Cursors::Hand;
this->e1->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
this->e1->Location = System::Drawing::Point(561, 166);
this->e1->Name = L"e1";
this->e1->Size = System::Drawing::Size(50, 50);
this->e1->TabIndex = 5;
this->e1->UseVisualStyleBackColor = true;
this->e1->Click += gcnew System::EventHandler(this, &myP::e1_Click);
//
// e2
//
this->e2->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"e2.BackgroundImage")));
this->e2->Cursor = System::Windows::Forms::Cursors::Hand;
this->e2->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
this->e2->Location = System::Drawing::Point(617, 166);
this->e2->Name = L"e2";
this->e2->Size = System::Drawing::Size(50, 50);
this->e2->TabIndex = 6;
this->e2->UseVisualStyleBackColor = true;
this->e2->Click += gcnew System::EventHandler(this, &myP::e2_Click);
//
// e4
//
this->e4->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"e4.BackgroundImage")));
this->e4->Cursor = System::Windows::Forms::Cursors::Hand;
this->e4->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
this->e4->Location = System::Drawing::Point(617, 222);
this->e4->Name = L"e4";
this->e4->Size = System::Drawing::Size(50, 50);
this->e4->TabIndex = 8;
this->e4->UseVisualStyleBackColor = true;
this->e4->Click += gcnew System::EventHandler(this, &myP::e4_Click);
//
// e3
//
this->e3->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"e3.BackgroundImage")));
this->e3->Cursor = System::Windows::Forms::Cursors::Hand;
this->e3->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
this->e3->Location = System::Drawing::Point(561, 222);
this->e3->Name = L"e3";
this->e3->Size = System::Drawing::Size(50, 50);

```

```

        this->e3->TabIndex = 7;
        this->e3->UseVisualStyleBackColor = true;
        this->e3->Click += gcnew System::EventHandler(this, &myP::e3_Click);
        //
        // e6
        //
        this->e6->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"e6.BackgroundImage")));
        this->e6->Cursor = System::Windows::Forms::Cursors::Hand;
        this->e6->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->e6->Location = System::Drawing::Point(617, 278);
        this->e6->Name = L"e6";
        this->e6->Size = System::Drawing::Size(50, 50);
        this->e6->TabIndex = 10;
        this->e6->UseVisualStyleBackColor = true;
        this->e6->Click += gcnew System::EventHandler(this, &myP::e6_Click);
        //
        // e5
        //
        this->e5->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"e5.BackgroundImage")));
        this->e5->Cursor = System::Windows::Forms::Cursors::Hand;
        this->e5->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->e5->Location = System::Drawing::Point(561, 278);
        this->e5->Name = L"e5";
        this->e5->Size = System::Drawing::Size(50, 50);
        this->e5->TabIndex = 9;
        this->e5->UseVisualStyleBackColor = true;
        this->e5->Click += gcnew System::EventHandler(this, &myP::e5_Click);
        //
        // e7
        //
        this->e7->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"e7.BackgroundImage")));
        this->e7->Cursor = System::Windows::Forms::Cursors::Hand;
        this->e7->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->e7->Location = System::Drawing::Point(561, 334);
        this->e7->Name = L"e7";
        this->e7->Size = System::Drawing::Size(50, 50);
        this->e7->TabIndex = 11;
        this->e7->UseVisualStyleBackColor = true;
        this->e7->Click += gcnew System::EventHandler(this, &myP::e7_Click);
        //
        // eP2
        //
        this->eP2->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"eP2.BackgroundImage")));
        this->eP2->Controls->Add(this->fNew);
        this->eP2->Controls->Add(this->fOld);
        this->eP2->Controls->Add(this->cylindersNew);
        this->eP2->Controls->Add(this->cylinderOld);
        this->eP2->Controls->Add(this->construNew);
        this->eP2->Controls->Add(this->construOld);
        this->eP2->Controls->Add(this->eatNew);
        this->eP2->Controls->Add(this->eatOld);
        this->eP2->Controls->Add(this->cqNew);
        this->eP2->Controls->Add(this->cqOld);
        this->eP2->Controls->Add(this->conCircleNew);

```

```

this->eP2->Controls->Add(this->conCircleOld);
this->eP2->Location = System::Drawing::Point(320, 127);
this->eP2->Name = L"eP2";
this->eP2->Size = System::Drawing::Size(55, 76);
this->eP2->TabIndex = 12;
//
// fNew
//
this->fNew->AutoSize = true;
this->fNew->BackColor = System::Drawing::Color::Transparent;
this->fNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->fNew->ForeColor = System::Drawing::Color::White;
this->fNew->Location = System::Drawing::Point(400, 269);
this->fNew->Name = L"fNew";
this->fNew->Size = System::Drawing::Size(0, 16);
this->fNew->TabIndex = 12;
//
// fOld
//
this->fOld->AutoSize = true;
this->fOld->BackColor = System::Drawing::Color::Transparent;
this->fOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->fOld->ForeColor = System::Drawing::Color::White;
this->fOld->Location = System::Drawing::Point(446, 269);
this->fOld->Name = L"fOld";
this->fOld->Size = System::Drawing::Size(0, 16);
this->fOld->TabIndex = 11;
//
// cylindersNew
//
this->cylindersNew->AutoSize = true;
this->cylindersNew->BackColor = System::Drawing::Color::Transparent;
this->cylindersNew->Font = (gcnew System::Drawing::Font(L"Arial",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->cylindersNew->ForeColor = System::Drawing::Color::White;
this->cylindersNew->Location = System::Drawing::Point(400, 168);
this->cylindersNew->Name = L"cylindersNew";
this->cylindersNew->Size = System::Drawing::Size(0, 16);
this->cylindersNew->TabIndex = 10;
//
// cylinderOld
//
this->cylinderOld->AutoSize = true;
this->cylinderOld->BackColor = System::Drawing::Color::Transparent;
this->cylinderOld->Font = (gcnew System::Drawing::Font(L"Arial",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->cylinderOld->ForeColor = System::Drawing::Color::White;
this->cylinderOld->Location = System::Drawing::Point(446, 168);
this->cylinderOld->Name = L"cylinderOld";
this->cylinderOld->Size = System::Drawing::Size(0, 16);
this->cylinderOld->TabIndex = 9;
//

```

```

// construNew
//
this->construNew->AutoSize = true;
this->construNew->BackColor = System::Drawing::Color::Transparent;
this->construNew->Font = (gcnew System::Drawing::Font(L"Arial",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->construNew->ForeColor = System::Drawing::Color::White;
this->construNew->Location = System::Drawing::Point(400, 69);
this->construNew->Name = L"construNew";
this->construNew->Size = System::Drawing::Size(0, 16);
this->construNew->TabIndex = 8;
//
// construOld
//
this->construOld->AutoSize = true;
this->construOld->BackColor = System::Drawing::Color::Transparent;
this->construOld->Font = (gcnew System::Drawing::Font(L"Arial",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->construOld->ForeColor = System::Drawing::Color::White;
this->construOld->Location = System::Drawing::Point(446, 69);
this->construOld->Name = L"construOld";
this->construOld->Size = System::Drawing::Size(0, 16);
this->construOld->TabIndex = 7;
//
// eatNew
//
this->eatNew->AutoSize = true;
this->eatNew->BackColor = System::Drawing::Color::Transparent;
this->eatNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->eatNew->ForeColor = System::Drawing::Color::White;
this->eatNew->Location = System::Drawing::Point(128, 269);
this->eatNew->Name = L"eatNew";
this->eatNew->Size = System::Drawing::Size(0, 16);
this->eatNew->TabIndex = 6;
//
// eatOld
//
this->eatOld->AutoSize = true;
this->eatOld->BackColor = System::Drawing::Color::Transparent;
this->eatOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->eatOld->ForeColor = System::Drawing::Color::White;
this->eatOld->Location = System::Drawing::Point(174, 269);
this->eatOld->Name = L"eatOld";
this->eatOld->Size = System::Drawing::Size(0, 16);
this->eatOld->TabIndex = 5;
//
// cqNew
//
this->cqNew->AutoSize = true;
this->cqNew->BackColor = System::Drawing::Color::Transparent;
this->cqNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,

```

```

        static_cast<System::Byte>(0)));
this->cqNew->ForeColor = System::Drawing::Color::White;
this->cqNew->Location = System::Drawing::Point(128, 168);
this->cqNew->Name = L"cqNew";
this->cqNew->Size = System::Drawing::Size(0, 16);
this->cqNew->TabIndex = 4;
//
// cqOld
//
this->cqOld->AutoSize = true;
this->cqOld->BackColor = System::Drawing::Color::Transparent;
this->cqOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
this->cqOld->ForeColor = System::Drawing::Color::White;
this->cqOld->Location = System::Drawing::Point(174, 168);
this->cqOld->Name = L"cqOld";
this->cqOld->Size = System::Drawing::Size(0, 16);
this->cqOld->TabIndex = 3;
//
// conCircleNew
//
this->conCircleNew->AutoSize = true;
this->conCircleNew->BackColor = System::Drawing::Color::Transparent;
this->conCircleNew->Font = (gcnew System::Drawing::Font(L"Arial",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
this->conCircleNew->ForeColor = System::Drawing::Color::White;
this->conCircleNew->Location = System::Drawing::Point(128, 69);
this->conCircleNew->Name = L"conCircleNew";
this->conCircleNew->Size = System::Drawing::Size(0, 16);
this->conCircleNew->TabIndex = 2;
//
// conCircleOld
//
this->conCircleOld->AutoSize = true;
this->conCircleOld->BackColor = System::Drawing::Color::Transparent;
this->conCircleOld->Font = (gcnew System::Drawing::Font(L"Arial",
9.75F, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
this->conCircleOld->ForeColor = System::Drawing::Color::White;
this->conCircleOld->Location = System::Drawing::Point(174, 69);
this->conCircleOld->Name = L"conCircleOld";
this->conCircleOld->Size = System::Drawing::Size(0, 16);
this->conCircleOld->TabIndex = 1;
//
// eP3
//
this->eP3->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"eP3.BackgroundImage")));
this->eP3->Controls->Add(this->aiNew);
this->eP3->Controls->Add(this->aiOld);
this->eP3->Controls->Add(this->ilNew);
this->eP3->Controls->Add(this->ilOld);
this->eP3->Controls->Add(this->gpNew);
this->eP3->Controls->Add(this->gpOld);
this->eP3->Controls->Add(this->ieNew);
this->eP3->Controls->Add(this->ieOld);

```

```

    this->eP3->Controls->Add(this->gNew);
    this->eP3->Controls->Add(this->gOld);
    this->eP3->Controls->Add(this->fdNew);
    this->eP3->Controls->Add(this->fdOld);
    this->eP3->Location = System::Drawing::Point(189, 127);
    this->eP3->Name = L"eP3";
    this->eP3->Size = System::Drawing::Size(67, 76);
    this->eP3->TabIndex = 13;
    //
    // aiNew
    //
    this->aiNew->AutoSize = true;
    this->aiNew->BackColor = System::Drawing::Color::Transparent;
    this->aiNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->aiNew->ForeColor = System::Drawing::Color::White;
    this->aiNew->Location = System::Drawing::Point(400, 269);
    this->aiNew->Name = L"aiNew";
    this->aiNew->Size = System::Drawing::Size(0, 16);
    this->aiNew->TabIndex = 12;
    //
    // aiOld
    //
    this->aiOld->AutoSize = true;
    this->aiOld->BackColor = System::Drawing::Color::Transparent;
    this->aiOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->aiOld->ForeColor = System::Drawing::Color::White;
    this->aiOld->Location = System::Drawing::Point(446, 269);
    this->aiOld->Name = L"aiOld";
    this->aiOld->Size = System::Drawing::Size(0, 16);
    this->aiOld->TabIndex = 11;
    //
    // ilNew
    //
    this->ilNew->AutoSize = true;
    this->ilNew->BackColor = System::Drawing::Color::Transparent;
    this->ilNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->ilNew->ForeColor = System::Drawing::Color::White;
    this->ilNew->Location = System::Drawing::Point(400, 168);
    this->ilNew->Name = L"ilNew";
    this->ilNew->Size = System::Drawing::Size(0, 16);
    this->ilNew->TabIndex = 10;
    //
    // ilOld
    //
    this->ilOld->AutoSize = true;
    this->ilOld->BackColor = System::Drawing::Color::Transparent;
    this->ilOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->ilOld->ForeColor = System::Drawing::Color::White;
    this->ilOld->Location = System::Drawing::Point(446, 168);
    this->ilOld->Name = L"ilOld";

```

```

this->ilOld->Size = System::Drawing::Size(0, 16);
this->ilOld->TabIndex = 9;
//
// gpNew
//
this->gpNew->AutoSize = true;
this->gpNew->BackColor = System::Drawing::Color::Transparent;
this->gpNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->gpNew->ForeColor = System::Drawing::Color::White;
this->gpNew->Location = System::Drawing::Point(400, 69);
this->gpNew->Name = L"gpNew";
this->gpNew->Size = System::Drawing::Size(0, 16);
this->gpNew->TabIndex = 8;
//
// gpOld
//
this->gpOld->AutoSize = true;
this->gpOld->BackColor = System::Drawing::Color::Transparent;
this->gpOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->gpOld->ForeColor = System::Drawing::Color::White;
this->gpOld->Location = System::Drawing::Point(446, 69);
this->gpOld->Name = L"gpOld";
this->gpOld->Size = System::Drawing::Size(0, 16);
this->gpOld->TabIndex = 7;
//
// ieNew
//
this->ieNew->AutoSize = true;
this->ieNew->BackColor = System::Drawing::Color::Transparent;
this->ieNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ieNew->ForeColor = System::Drawing::Color::White;
this->ieNew->Location = System::Drawing::Point(128, 269);
this->ieNew->Name = L"ieNew";
this->ieNew->Size = System::Drawing::Size(0, 16);
this->ieNew->TabIndex = 6;
//
// ieOld
//
this->ieOld->AutoSize = true;
this->ieOld->BackColor = System::Drawing::Color::Transparent;
this->ieOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ieOld->ForeColor = System::Drawing::Color::White;
this->ieOld->Location = System::Drawing::Point(174, 269);
this->ieOld->Name = L"ieOld";
this->ieOld->Size = System::Drawing::Size(0, 16);
this->ieOld->TabIndex = 5;
//
// gNew
//
this->gNew->AutoSize = true;

```

```

        this->gNew->BackColor = System::Drawing::Color::Transparent;
        this->gNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->gNew->ForeColor = System::Drawing::Color::White;
        this->gNew->Location = System::Drawing::Point(128, 168);
        this->gNew->Name = L"gNew";
        this->gNew->Size = System::Drawing::Size(0, 16);
        this->gNew->TabIndex = 4;
        //
        // gOld
        //
        this->gOld->AutoSize = true;
        this->gOld->BackColor = System::Drawing::Color::Transparent;
        this->gOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->gOld->ForeColor = System::Drawing::Color::White;
        this->gOld->Location = System::Drawing::Point(174, 168);
        this->gOld->Name = L"gOld";
        this->gOld->Size = System::Drawing::Size(0, 16);
        this->gOld->TabIndex = 3;
        //
        // fdNew
        //
        this->fdNew->AutoSize = true;
        this->fdNew->BackColor = System::Drawing::Color::Transparent;
        this->fdNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->fdNew->ForeColor = System::Drawing::Color::White;
        this->fdNew->Location = System::Drawing::Point(128, 69);
        this->fdNew->Name = L"fdNew";
        this->fdNew->Size = System::Drawing::Size(0, 16);
        this->fdNew->TabIndex = 2;
        //
        // fdOld
        //
        this->fdOld->AutoSize = true;
        this->fdOld->BackColor = System::Drawing::Color::Transparent;
        this->fdOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->fdOld->ForeColor = System::Drawing::Color::White;
        this->fdOld->Location = System::Drawing::Point(174, 69);
        this->fdOld->Name = L"fdOld";
        this->fdOld->Size = System::Drawing::Size(0, 16);
        this->fdOld->TabIndex = 1;
        //
        // eP4
        //
        this->eP4->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"eP4.BackgroundImage")));
        this->eP4->Controls->Add(this->nbNew);
        this->eP4->Controls->Add(this->nbOld);
        this->eP4->Controls->Add(this->mNew);
        this->eP4->Controls->Add(this->mOld);
        this->eP4->Controls->Add(this->lcmNew);

```

```

this->eP4->Controls->Add(this->lcmOld);
this->eP4->Controls->Add(this->mptNew);
this->eP4->Controls->Add(this->mptOld);
this->eP4->Controls->Add(this->lNew);
this->eP4->Controls->Add(this->lOld);
this->eP4->Controls->Add(this->riNew);
this->eP4->Controls->Add(this->riOld);
this->eP4->Location = System::Drawing::Point(5, 196);
this->eP4->Name = L"eP4";
this->eP4->Size = System::Drawing::Size(80, 65);
this->eP4->TabIndex = 14;
//
// nbNew
//
this->nbNew->AutoSize = true;
this->nbNew->BackColor = System::Drawing::Color::Transparent;
this->nbNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->nbNew->ForeColor = System::Drawing::Color::White;
this->nbNew->Location = System::Drawing::Point(400, 269);
this->nbNew->Name = L"nbNew";
this->nbNew->Size = System::Drawing::Size(0, 16);
this->nbNew->TabIndex = 12;
//
// nbOld
//
this->nbOld->AutoSize = true;
this->nbOld->BackColor = System::Drawing::Color::Transparent;
this->nbOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->nbOld->ForeColor = System::Drawing::Color::White;
this->nbOld->Location = System::Drawing::Point(446, 269);
this->nbOld->Name = L"nbOld";
this->nbOld->Size = System::Drawing::Size(0, 16);
this->nbOld->TabIndex = 11;
//
// mNew
//
this->mNew->AutoSize = true;
this->mNew->BackColor = System::Drawing::Color::Transparent;
this->mNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->mNew->ForeColor = System::Drawing::Color::White;
this->mNew->Location = System::Drawing::Point(400, 168);
this->mNew->Name = L"mNew";
this->mNew->Size = System::Drawing::Size(0, 16);
this->mNew->TabIndex = 10;
//
// mOld
//
this->mOld->AutoSize = true;
this->mOld->BackColor = System::Drawing::Color::Transparent;
this->mOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

this->mOld->ForeColor = System::Drawing::Color::White;
this->mOld->Location = System::Drawing::Point(446, 168);
this->mOld->Name = L"mOld";
this->mOld->Size = System::Drawing::Size(0, 16);
this->mOld->TabIndex = 9;
//
// lcmNew
//
this->lcmNew->AutoSize = true;
this->lcmNew->BackColor = System::Drawing::Color::Transparent;
this->lcmNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->lcmNew->ForeColor = System::Drawing::Color::White;
this->lcmNew->Location = System::Drawing::Point(400, 69);
this->lcmNew->Name = L"lcmNew";
this->lcmNew->Size = System::Drawing::Size(0, 16);
this->lcmNew->TabIndex = 8;
//
// lcmOld
//
this->lcmOld->AutoSize = true;
this->lcmOld->BackColor = System::Drawing::Color::Transparent;
this->lcmOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->lcmOld->ForeColor = System::Drawing::Color::White;
this->lcmOld->Location = System::Drawing::Point(446, 69);
this->lcmOld->Name = L"lcmOld";
this->lcmOld->Size = System::Drawing::Size(0, 16);
this->lcmOld->TabIndex = 7;
//
// mptNew
//
this->mptNew->AutoSize = true;
this->mptNew->BackColor = System::Drawing::Color::Transparent;
this->mptNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->mptNew->ForeColor = System::Drawing::Color::White;
this->mptNew->Location = System::Drawing::Point(128, 269);
this->mptNew->Name = L"mptNew";
this->mptNew->Size = System::Drawing::Size(0, 16);
this->mptNew->TabIndex = 6;
//
// mptOld
//
this->mptOld->AutoSize = true;
this->mptOld->BackColor = System::Drawing::Color::Transparent;
this->mptOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->mptOld->ForeColor = System::Drawing::Color::White;
this->mptOld->Location = System::Drawing::Point(174, 269);
this->mptOld->Name = L"mptOld";
this->mptOld->Size = System::Drawing::Size(0, 16);
this->mptOld->TabIndex = 5;
//

```

```

// lNew
//
this->lNew->AutoSize = true;
this->lNew->BackColor = System::Drawing::Color::Transparent;
this->lNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->lNew->ForeColor = System::Drawing::Color::White;
this->lNew->Location = System::Drawing::Point(128, 168);
this->lNew->Name = L"lNew";
this->lNew->Size = System::Drawing::Size(0, 16);
this->lNew->TabIndex = 4;
//
// lOld
//
this->lOld->AutoSize = true;
this->lOld->BackColor = System::Drawing::Color::Transparent;
this->lOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->lOld->ForeColor = System::Drawing::Color::White;
this->lOld->Location = System::Drawing::Point(174, 168);
this->lOld->Name = L"lOld";
this->lOld->Size = System::Drawing::Size(0, 16);
this->lOld->TabIndex = 3;
//
// riNew
//
this->riNew->AutoSize = true;
this->riNew->BackColor = System::Drawing::Color::Transparent;
this->riNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->riNew->ForeColor = System::Drawing::Color::White;
this->riNew->Location = System::Drawing::Point(128, 69);
this->riNew->Name = L"riNew";
this->riNew->Size = System::Drawing::Size(0, 16);
this->riNew->TabIndex = 2;
//
// riOld
//
this->riOld->AutoSize = true;
this->riOld->BackColor = System::Drawing::Color::Transparent;
this->riOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->riOld->ForeColor = System::Drawing::Color::White;
this->riOld->Location = System::Drawing::Point(174, 69);
this->riOld->Name = L"riOld";
this->riOld->Size = System::Drawing::Size(0, 16);
this->riOld->TabIndex = 1;
//
// eP5
//
this->eP5->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"eP5.BackgroundImage")));
this->eP5->Controls->Add(this->ratNew);
this->eP5->Controls->Add(this->ratOld);

```

```

this->eP5->Controls->Add(this->proNew);
this->eP5->Controls->Add(this->proOld);
this->eP5->Controls->Add(this->perNew);
this->eP5->Controls->Add(this->perOld);
this->eP5->Controls->Add(this->rNew);
this->eP5->Controls->Add(this->rOld);
this->eP5->Controls->Add(this->pNew);
this->eP5->Controls->Add(this->pOld);
this->eP5->Controls->Add(this->paraNew);
this->eP5->Controls->Add(this->paraOld);
this->eP5->Location = System::Drawing::Point(262, 127);
this->eP5->Name = L"eP5";
this->eP5->Size = System::Drawing::Size(50, 66);
this->eP5->TabIndex = 15;
//
// ratNew
//
this->ratNew->AutoSize = true;
this->ratNew->BackColor = System::Drawing::Color::Transparent;
this->ratNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ratNew->ForeColor = System::Drawing::Color::White;
this->ratNew->Location = System::Drawing::Point(400, 269);
this->ratNew->Name = L"ratNew";
this->ratNew->Size = System::Drawing::Size(0, 16);
this->ratNew->TabIndex = 12;
//
// ratOld
//
this->ratOld->AutoSize = true;
this->ratOld->BackColor = System::Drawing::Color::Transparent;
this->ratOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ratOld->ForeColor = System::Drawing::Color::White;
this->ratOld->Location = System::Drawing::Point(446, 269);
this->ratOld->Name = L"ratOld";
this->ratOld->Size = System::Drawing::Size(0, 16);
this->ratOld->TabIndex = 11;
//
// proNew
//
this->proNew->AutoSize = true;
this->proNew->BackColor = System::Drawing::Color::Transparent;
this->proNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->proNew->ForeColor = System::Drawing::Color::White;
this->proNew->Location = System::Drawing::Point(400, 168);
this->proNew->Name = L"proNew";
this->proNew->Size = System::Drawing::Size(0, 16);
this->proNew->TabIndex = 10;
//
// proOld
//
this->proOld->AutoSize = true;
this->proOld->BackColor = System::Drawing::Color::Transparent;

```

```

        this->proOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->proOld->ForeColor = System::Drawing::Color::White;
        this->proOld->Location = System::Drawing::Point(446, 168);
        this->proOld->Name = L"proOld";
        this->proOld->Size = System::Drawing::Size(0, 16);
        this->proOld->TabIndex = 9;
        //
        // perNew
        //
        this->perNew->AutoSize = true;
        this->perNew->BackColor = System::Drawing::Color::Transparent;
        this->perNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->perNew->ForeColor = System::Drawing::Color::White;
        this->perNew->Location = System::Drawing::Point(400, 69);
        this->perNew->Name = L"perNew";
        this->perNew->Size = System::Drawing::Size(0, 16);
        this->perNew->TabIndex = 8;
        //
        // perOld
        //
        this->perOld->AutoSize = true;
        this->perOld->BackColor = System::Drawing::Color::Transparent;
        this->perOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->perOld->ForeColor = System::Drawing::Color::White;
        this->perOld->Location = System::Drawing::Point(446, 69);
        this->perOld->Name = L"perOld";
        this->perOld->Size = System::Drawing::Size(0, 16);
        this->perOld->TabIndex = 7;
        //
        // rNew
        //
        this->rNew->AutoSize = true;
        this->rNew->BackColor = System::Drawing::Color::Transparent;
        this->rNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->rNew->ForeColor = System::Drawing::Color::White;
        this->rNew->Location = System::Drawing::Point(128, 269);
        this->rNew->Name = L"rNew";
        this->rNew->Size = System::Drawing::Size(0, 16);
        this->rNew->TabIndex = 6;
        //
        // rOld
        //
        this->rOld->AutoSize = true;
        this->rOld->BackColor = System::Drawing::Color::Transparent;
        this->rOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->rOld->ForeColor = System::Drawing::Color::White;
        this->rOld->Location = System::Drawing::Point(174, 269);
        this->rOld->Name = L"rOld";

```

```

this->rOld->Size = System::Drawing::Size(0, 16);
this->rOld->TabIndex = 5;
//
// pNew
//
this->pNew->AutoSize = true;
this->pNew->BackColor = System::Drawing::Color::Transparent;
this->pNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->pNew->ForeColor = System::Drawing::Color::White;
this->pNew->Location = System::Drawing::Point(128, 168);
this->pNew->Name = L"pNew";
this->pNew->Size = System::Drawing::Size(0, 16);
this->pNew->TabIndex = 4;
//
// pOld
//
this->pOld->AutoSize = true;
this->pOld->BackColor = System::Drawing::Color::Transparent;
this->pOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->pOld->ForeColor = System::Drawing::Color::White;
this->pOld->Location = System::Drawing::Point(174, 168);
this->pOld->Name = L"pOld";
this->pOld->Size = System::Drawing::Size(0, 16);
this->pOld->TabIndex = 3;
//
// paraNew
//
this->paraNew->AutoSize = true;
this->paraNew->BackColor = System::Drawing::Color::Transparent;
this->paraNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->paraNew->ForeColor = System::Drawing::Color::White;
this->paraNew->Location = System::Drawing::Point(128, 69);
this->paraNew->Name = L"paraNew";
this->paraNew->Size = System::Drawing::Size(0, 16);
this->paraNew->TabIndex = 2;
//
// paraOld
//
this->paraOld->AutoSize = true;
this->paraOld->BackColor = System::Drawing::Color::Transparent;
this->paraOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->paraOld->ForeColor = System::Drawing::Color::White;
this->paraOld->Location = System::Drawing::Point(174, 69);
this->paraOld->Name = L"paraOld";
this->paraOld->Size = System::Drawing::Size(0, 16);
this->paraOld->TabIndex = 1;
//
// eP6
//

```

```

        this->eP6->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"eP6.BackgroundImage")));
        this->eP6->Controls->Add(this->sasNew);
        this->eP6->Controls->Add(this->sasOld);
        this->eP6->Controls->Add(this->ptNew);
        this->eP6->Controls->Add(this->ptOld);
        this->eP6->Controls->Add(this->rdNew);
        this->eP6->Controls->Add(this->rdOld);
        this->eP6->Controls->Add(this->srNew);
        this->eP6->Controls->Add(this->srOld);
        this->eP6->Controls->Add(this->spNew);
        this->eP6->Controls->Add(this->spOld);
        this->eP6->Controls->Add(this->sNew);
        this->eP6->Controls->Add(this->sOld);
        this->eP6->Location = System::Drawing::Point(79, 127);
        this->eP6->Name = L"eP6";
        this->eP6->Size = System::Drawing::Size(41, 50);
        this->eP6->TabIndex = 16;
        //
        // sasNew
        //
        this->sasNew->AutoSize = true;
        this->sasNew->BackColor = System::Drawing::Color::Transparent;
        this->sasNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->sasNew->ForeColor = System::Drawing::Color::White;
        this->sasNew->Location = System::Drawing::Point(400, 269);
        this->sasNew->Name = L"sasNew";
        this->sasNew->RightToLeft = System::Windows::Forms::RightToLeft::No;
        this->sasNew->Size = System::Drawing::Size(0, 16);
        this->sasNew->TabIndex = 12;
        //
        // sasOld
        //
        this->sasOld->AutoSize = true;
        this->sasOld->BackColor = System::Drawing::Color::Transparent;
        this->sasOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->sasOld->ForeColor = System::Drawing::Color::White;
        this->sasOld->Location = System::Drawing::Point(446, 269);
        this->sasOld->Name = L"sasOld";
        this->sasOld->Size = System::Drawing::Size(0, 16);
        this->sasOld->TabIndex = 11;
        //
        // ptNew
        //
        this->ptNew->AutoSize = true;
        this->ptNew->BackColor = System::Drawing::Color::Transparent;
        this->ptNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->ptNew->ForeColor = System::Drawing::Color::White;
        this->ptNew->Location = System::Drawing::Point(400, 168);
        this->ptNew->Name = L"ptNew";
        this->ptNew->Size = System::Drawing::Size(0, 16);
        this->ptNew->TabIndex = 10;

```

```

//
// ptOld
//
this->ptOld->AutoSize = true;
this->ptOld->BackColor = System::Drawing::Color::Transparent;
this->ptOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ptOld->ForeColor = System::Drawing::Color::White;
this->ptOld->Location = System::Drawing::Point(446, 168);
this->ptOld->Name = L"ptOld";
this->ptOld->Size = System::Drawing::Size(0, 16);
this->ptOld->TabIndex = 9;
//
// rdNew
//
this->rdNew->AutoSize = true;
this->rdNew->BackColor = System::Drawing::Color::Transparent;
this->rdNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->rdNew->ForeColor = System::Drawing::Color::White;
this->rdNew->Location = System::Drawing::Point(400, 69);
this->rdNew->Name = L"rdNew";
this->rdNew->Size = System::Drawing::Size(0, 16);
this->rdNew->TabIndex = 8;
//
// rdOld
//
this->rdOld->AutoSize = true;
this->rdOld->BackColor = System::Drawing::Color::Transparent;
this->rdOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->rdOld->ForeColor = System::Drawing::Color::White;
this->rdOld->Location = System::Drawing::Point(446, 69);
this->rdOld->Name = L"rdOld";
this->rdOld->Size = System::Drawing::Size(0, 16);
this->rdOld->TabIndex = 7;
//
// srNew
//
this->srNew->AutoSize = true;
this->srNew->BackColor = System::Drawing::Color::Transparent;
this->srNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->srNew->ForeColor = System::Drawing::Color::White;
this->srNew->Location = System::Drawing::Point(128, 269);
this->srNew->Name = L"srNew";
this->srNew->Size = System::Drawing::Size(0, 16);
this->srNew->TabIndex = 6;
//
// srOld
//
this->srOld->AutoSize = true;
this->srOld->BackColor = System::Drawing::Color::Transparent;

```

```

        this->srOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->srOld->ForeColor = System::Drawing::Color::White;
        this->srOld->Location = System::Drawing::Point(174, 269);
        this->srOld->Name = L"srOld";
        this->srOld->Size = System::Drawing::Size(0, 16);
        this->srOld->TabIndex = 5;
        //
        // spNew
        //
        this->spNew->AutoSize = true;
        this->spNew->BackColor = System::Drawing::Color::Transparent;
        this->spNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->spNew->ForeColor = System::Drawing::Color::White;
        this->spNew->Location = System::Drawing::Point(128, 168);
        this->spNew->Name = L"spNew";
        this->spNew->Size = System::Drawing::Size(0, 16);
        this->spNew->TabIndex = 4;
        //
        // spOld
        //
        this->spOld->AutoSize = true;
        this->spOld->BackColor = System::Drawing::Color::Transparent;
        this->spOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->spOld->ForeColor = System::Drawing::Color::White;
        this->spOld->Location = System::Drawing::Point(174, 168);
        this->spOld->Name = L"spOld";
        this->spOld->Size = System::Drawing::Size(0, 16);
        this->spOld->TabIndex = 3;
        //
        // sNew
        //
        this->sNew->AutoSize = true;
        this->sNew->BackColor = System::Drawing::Color::Transparent;
        this->sNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->sNew->ForeColor = System::Drawing::Color::White;
        this->sNew->Location = System::Drawing::Point(128, 69);
        this->sNew->Name = L"sNew";
        this->sNew->Size = System::Drawing::Size(0, 16);
        this->sNew->TabIndex = 2;
        //
        // sOld
        //
        this->sOld->AutoSize = true;
        this->sOld->BackColor = System::Drawing::Color::Transparent;
        this->sOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->sOld->ForeColor = System::Drawing::Color::White;
        this->sOld->Location = System::Drawing::Point(174, 69);
        this->sOld->Name = L"sOld";

```

```

        this->sOld->Size = System::Drawing::Size(0, 16);
        this->sOld->TabIndex = 1;
        //
        // eP7
        //
        this->eP7->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"eP7.BackgroundImage")));
        this->eP7->Controls->Add(this->rnOld);
        this->eP7->Controls->Add(this->vsNew);
        this->eP7->Controls->Add(this->vsOld);
        this->eP7->Controls->Add(this->trNew);
        this->eP7->Controls->Add(this->trOld);
        this->eP7->Controls->Add(this->taNew);
        this->eP7->Controls->Add(this->taOld);
        this->eP7->Controls->Add(this->tNew);
        this->eP7->Controls->Add(this->tOld);
        this->eP7->Controls->Add(this->tiNew);
        this->eP7->Controls->Add(this->tiOld);
        this->eP7->Controls->Add(this->rnNew);
        this->eP7->Location = System::Drawing::Point(126, 147);
        this->eP7->Name = L"eP7";
        this->eP7->Size = System::Drawing::Size(57, 56);
        this->eP7->TabIndex = 17;
        //
        // rnOld
        //
        this->rnOld->AutoSize = true;
        this->rnOld->BackColor = System::Drawing::Color::Transparent;
        this->rnOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                      static_cast<System::Byte>(0)));
        this->rnOld->ForeColor = System::Drawing::Color::White;
        this->rnOld->Location = System::Drawing::Point(174, 69);
        this->rnOld->Name = L"rnOld";
        this->rnOld->Size = System::Drawing::Size(0, 16);
        this->rnOld->TabIndex = 1;
        //
        // vsNew
        //
        this->vsNew->AutoSize = true;
        this->vsNew->BackColor = System::Drawing::Color::Transparent;
        this->vsNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                      static_cast<System::Byte>(0)));
        this->vsNew->ForeColor = System::Drawing::Color::White;
        this->vsNew->Location = System::Drawing::Point(400, 269);
        this->vsNew->Name = L"vsNew";
        this->vsNew->Size = System::Drawing::Size(0, 16);
        this->vsNew->TabIndex = 12;
        //
        // vsOld
        //
        this->vsOld->AutoSize = true;
        this->vsOld->BackColor = System::Drawing::Color::Transparent;
        this->vsOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                      static_cast<System::Byte>(0)));
        this->vsOld->ForeColor = System::Drawing::Color::White;

```

```

this->vsOld->Location = System::Drawing::Point(446, 269);
this->vsOld->Name = L"vsOld";
this->vsOld->Size = System::Drawing::Size(0, 16);
this->vsOld->TabIndex = 11;
//
// trNew
//
this->trNew->AutoSize = true;
this->trNew->BackColor = System::Drawing::Color::Transparent;
this->trNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->trNew->ForeColor = System::Drawing::Color::White;
this->trNew->Location = System::Drawing::Point(400, 168);
this->trNew->Name = L"trNew";
this->trNew->Size = System::Drawing::Size(0, 16);
this->trNew->TabIndex = 10;
//
// trOld
//
this->trOld->AutoSize = true;
this->trOld->BackColor = System::Drawing::Color::Transparent;
this->trOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->trOld->ForeColor = System::Drawing::Color::White;
this->trOld->Location = System::Drawing::Point(446, 168);
this->trOld->Name = L"trOld";
this->trOld->Size = System::Drawing::Size(0, 16);
this->trOld->TabIndex = 9;
//
// taNew
//
this->taNew->AutoSize = true;
this->taNew->BackColor = System::Drawing::Color::Transparent;
this->taNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->taNew->ForeColor = System::Drawing::Color::White;
this->taNew->Location = System::Drawing::Point(400, 69);
this->taNew->Name = L"taNew";
this->taNew->Size = System::Drawing::Size(0, 16);
this->taNew->TabIndex = 8;
//
// taOld
//
this->taOld->AutoSize = true;
this->taOld->BackColor = System::Drawing::Color::Transparent;
this->taOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->taOld->ForeColor = System::Drawing::Color::White;
this->taOld->Location = System::Drawing::Point(446, 69);
this->taOld->Name = L"taOld";
this->taOld->Size = System::Drawing::Size(0, 16);
this->taOld->TabIndex = 7;
//
// tNew

```

```

//  

this->tNew->AutoSize = true;  

this->tNew->BackColor = System::Drawing::Color::Transparent;  

this->tNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->tNew->ForeColor = System::Drawing::Color::White;  

this->tNew->Location = System::Drawing::Point(128, 269);  

this->tNew->Name = L"tNew";  

this->tNew->RightToLeft = System::Windows::Forms::RightToLeft::No;  

this->tNew->Size = System::Drawing::Size(0, 16);  

this->tNew->TabIndex = 6;  

//  

// tOld  

//  

this->tOld->AutoSize = true;  

this->tOld->BackColor = System::Drawing::Color::Transparent;  

this->tOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->tOld->ForeColor = System::Drawing::Color::White;  

this->tOld->Location = System::Drawing::Point(174, 269);  

this->tOld->Name = L"tOld";  

this->tOld->Size = System::Drawing::Size(0, 16);  

this->tOld->TabIndex = 5;  

//  

// tiNew  

//  

this->tiNew->AutoSize = true;  

this->tiNew->BackColor = System::Drawing::Color::Transparent;  

this->tiNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->tiNew->ForeColor = System::Drawing::Color::White;  

this->tiNew->Location = System::Drawing::Point(128, 168);  

this->tiNew->Name = L"tiNew";  

this->tiNew->Size = System::Drawing::Size(0, 16);  

this->tiNew->TabIndex = 4;  

//  

// tiOld  

//  

this->tiOld->AutoSize = true;  

this->tiOld->BackColor = System::Drawing::Color::Transparent;  

this->tiOld->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->tiOld->ForeColor = System::Drawing::Color::White;  

this->tiOld->Location = System::Drawing::Point(174, 168);  

this->tiOld->Name = L"tiOld";  

this->tiOld->Size = System::Drawing::Size(0, 16);  

this->tiOld->TabIndex = 3;  

//  

// rnNew  

//  

this->rnNew->AutoSize = true;  

this->rnNew->BackColor = System::Drawing::Color::Transparent;  

this->rnNew->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,

```

```

        static_cast<System::Byte>(0)));
this->rnNew->ForeColor = System::Drawing::Color::White;
this->rnNew->Location = System::Drawing::Point(128, 69);
this->rnNew->Name = L"rnNew";
this->rnNew->Size = System::Drawing::Size(0, 16);
this->rnNew->TabIndex = 2;
//
// myP
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
(resources->GetObject(L"$this.BackgroundImage")));
this->ClientSize = System::Drawing::Size(672, 435);
this->Controls->Add(this->eP7);
this->Controls->Add(this->eP6);
this->Controls->Add(this->eP5);
this->Controls->Add(this->eP4);
this->Controls->Add(this->eP3);
this->Controls->Add(this->eP2);
this->Controls->Add(this->eP1);
this->Controls->Add(this->e7);
this->Controls->Add(this->e6);
this->Controls->Add(this->e5);
this->Controls->Add(this->e4);
this->Controls->Add(this->e3);
this->Controls->Add(this->e2);
this->Controls->Add(this->e1);
this->Controls->Add(this->panel3);
this->Controls->Add(this->panel1);
this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
this->MaximizeBox = false;
this->MinimizeBox = false;
this->Name = L"myP";
this->ShowIcon = false;
this->ShowInTaskbar = false;
this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
this->Text = L"Profile";
this->Load += gcnew System::EventHandler(this, &myP::myP_Load);
this->panel1->ResumeLayout(false);
this->myPic->ResumeLayout(false);
this->panel3->ResumeLayout(false);
this->eP1->ResumeLayout(false);
this->eP1->PerformLayout();
this->eP2->ResumeLayout(false);
this->eP2->PerformLayout();
this->eP3->ResumeLayout(false);
this->eP3->PerformLayout();
this->eP4->ResumeLayout(false);
this->eP4->PerformLayout();
this->eP5->ResumeLayout(false);
this->eP5->PerformLayout();
this->eP6->ResumeLayout(false);
this->eP6->PerformLayout();
this->eP7->ResumeLayout(false);

```

```

        this->eP7->PerformLayout();
        this->ResumeLayout(false);

    }

#pragma endregion

private: System::Void e1_Click(System::Object^ sender, System::EventArgs^ e) {
    showE(eP1);
}

private: System::Void e2_Click(System::Object^ sender, System::EventArgs^ e) {
    showE(eP2);
}

private: System::Void e3_Click(System::Object^ sender, System::EventArgs^ e) {
    showE(eP3);
}

private: System::Void e4_Click(System::Object^ sender, System::EventArgs^ e) {
    showE(eP4);
}

private: System::Void e5_Click(System::Object^ sender, System::EventArgs^ e) {
    showE(eP5);
}

private: System::Void e6_Click(System::Object^ sender, System::EventArgs^ e) {
    showE(eP6);
}

private: System::Void e7_Click(System::Object^ sender, System::EventArgs^ e) {
    showE(eP7);
}

private: System::Void myP_Load(System::Object^ sender, System::EventArgs^ e) {
    showE(eP1);
}

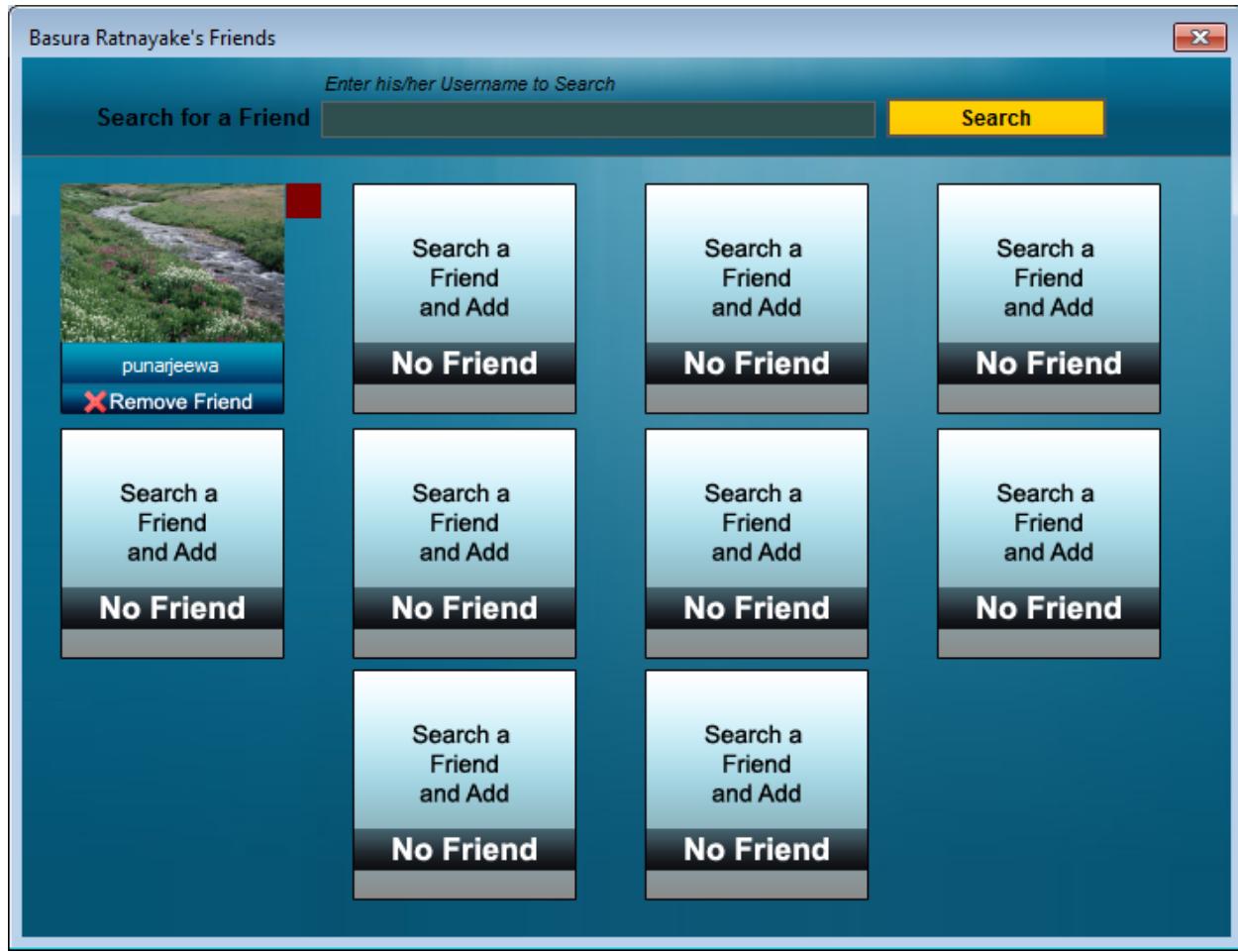
private: System::Void vProfile_Click(System::Object^ sender, System::EventArgs^ e) {
    try{

        System::Diagnostics::Process::Start("http://mole.loomhost.com/signin");
        }catch (Exception^ ex){
            MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
        }
    }
};

}

```

vi. My Friends



1. loadContent.cpp

```
#include "loadContent.h"
```

2. loadContent.h

```
#pragma once

namespace FMOLE {

    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 loadContent
    /// </summary>
    public ref class loadContent : public System::Windows::Forms::Form
```

```

{
public:
    loadContent(void)
    {
        InitializeComponent();
        tim->Enabled=true;
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
~loadContent()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::Label^ showM;
private: System::Windows::Forms::Timer^ tim;

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

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
void InitializeComponent(void)
{
    this->components = (gcnew System::ComponentModel::Container());
    System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(loadContent::typeid));
    this->showM = (gcnew System::Windows::Forms::Label());
    this->tim = (gcnew System::Windows::Forms::Timer(this->components));
    this->SuspendLayout();
    //
    // showM
    //
    this->showM->BackColor = System::Drawing::Color::Transparent;
    this->showM->Cursor = System::Windows::Forms::Cursors::WaitCursor;
    this->showM->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
    this->showM->ForeColor = System::Drawing::Color::White;
    this->showM->Location = System::Drawing::Point(-1, 0);
    this->showM->Name = L"showM";
    this->showM->Size = System::Drawing::Size(511, 37);
    this->showM->TabIndex = 1;
    this->showM->Text = L"Please Wait Loading Your Friend Information";
}

```

```

        this->showM->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // tim
        //
        this->tim->Tick += gcnew System::EventHandler(this,
&loadContent::tim_Tick);
        //
        // loadContent
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->ClientSize = System::Drawing::Size(511, 37);
        this->ControlBox = false;
        this->Controls->Add(this->showM);
        this->ForeColor = System::Drawing::Color::Black;
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::None;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"loadContent";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Show;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->TopMost = true;
        this->ResumeLayout(false);

    }

#pragma endregion

private: System::Void tim_Tick(System::Object^ sender, System::EventArgs^ e) {
    if(showM->Text->Contains("....")){
        showM->Text=showM->Text->Replace("....","");
    }
    showM->Text=showM->Text + ".";
}
};

}

```

3. base.cpp

```
#include "baseF.h"
```

4. base.h

```
using namespace fMOLE; //the project name in your header file
```

```
[STAThreadAttribute]
int main(array<System::String ^> ^args)
{
    Application::EnableVisualStyles();
    Application::SetCompatibleTextRenderingDefault(false);

    Application::Run(gcnew baseF());
    return 0;
}

#pragma once
#include "searchR.h"
#include "loadContent.h"

namespace fMOLE {

    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;
    using namespace std;

    /// <summary>
    /// Summary for baseF
    /// </summary>
public ref class baseF : public System::Windows::Forms::Form
{
public:
    String^ path;

private: System::Windows::Forms::PictureBox^ o1;
public:
    array< Panel^ >^ pSet;
    array< PictureBox^ >^ picSet;
    array< PictureBox^ >^ onlSet;
    array< PictureBox^ >^ remSet;
private: System::Windows::Forms::Panel^ reqPanel;
private: System::Windows::Forms::Panel^ req3;
public:

private: System::Windows::Forms::Label^ reqs3;

private: System::Windows::Forms::Label^ requ3;
private: System::Windows::Forms::PictureBox^ reqi3;
```

```
private: System::Windows::Forms::Label^  label13;
private: System::Windows::Forms::Label^  label14;
private: System::Windows::Forms::PictureBox^  pictureBox9;
private: System::Windows::Forms::PictureBox^  pictureBox10;
private: System::Windows::Forms::Panel^  req2;

private: System::Windows::Forms::Label^  reqs2;

private: System::Windows::Forms::Label^  requ2;
private: System::Windows::Forms::PictureBox^  requi2;

private: System::Windows::Forms::Label^  label9;
private: System::Windows::Forms::Label^  label10;
private: System::Windows::Forms::PictureBox^  pictureBox4;
private: System::Windows::Forms::PictureBox^  pictureBox5;
private: System::Windows::Forms::PictureBox^  pictureBox1;
private: System::Windows::Forms::Label^  label2;
private: System::Windows::Forms::Panel^  req1;

private: System::Windows::Forms::Label^  reqs1;

private: System::Windows::Forms::Label^  requ1;
private: System::Windows::Forms::PictureBox^  requi1;

private: System::Windows::Forms::Label^  label3;
private: System::Windows::Forms::Label^  label4;
private: System::Windows::Forms::PictureBox^  pictureBox6;
private: System::Windows::Forms::PictureBox^  pictureBox7;
private: System::Windows::Forms::Label^  reqNo;

private: System::Windows::Forms::Panel^  req4;

private: System::Windows::Forms::Label^  reqs4;

private: System::Windows::Forms::Label^  requ4;
private: System::Windows::Forms::PictureBox^  requi4;

private: System::Windows::Forms::Label^  label18;
private: System::Windows::Forms::Label^  label19;
private: System::Windows::Forms::PictureBox^  pictureBox12;
private: System::Windows::Forms::PictureBox^  pictureBox13;
private: System::Windows::Forms::Panel^  req5;

private: System::Windows::Forms::Label^  reqs5;

private: System::Windows::Forms::Label^  requ5;
private: System::Windows::Forms::PictureBox^  requi5;

private: System::Windows::Forms::Label^  label7;
```

```

private: System::Windows::Forms::Label^  label8;
private: System::Windows::Forms::PictureBox^  pictureBox15;
private: System::Windows::Forms::PictureBox^  pictureBox16;
private: System::Windows::Forms::PictureBox^  reqP;
private: System::Windows::Forms::Timer^  tim;

public:

public:
    array< Label^ >^ labSet;
    void setPanels(){
        int showR,showC;
        setSearch(2, searchT->Text);
        //Panels
        pSet= gcnew array< Panel^ >(10);
        pSet[0]=f1;pSet[1]=f2;pSet[2]=f3;pSet[3]=f4;
        pSet[4]=f5;pSet[5]=f6;pSet[6]=f7;pSet[7]=f8;
        pSet[8]=f9;pSet[9]=f10;
        //Pictures
        picSet= gcnew array< PictureBox^ >(10);
        picSet[0]=p1;picSet[1]=p2;picSet[2]=p3;picSet[3]=p4;
        picSet[4]=p5;picSet[5]=p6;picSet[6]=p7;picSet[7]=p8;
        picSet[8]=p9;picSet[9]=p10;

        onlSet= gcnew array< PictureBox^ >(10);
        onlSet[0]=o1;onlSet[1]=o2;onlSet[2]=o3;onlSet[3]=o4;
        onlSet[4]=o5;onlSet[5]=o6;onlSet[6]=o7;onlSet[7]=o8;
        onlSet[8]=o9;onlSet[9]=o10;

        remSet= gcnew array< PictureBox^ >(10);
        remSet[0]=r1;remSet[1]=r2;remSet[2]=r3;remSet[3]=r4;
        remSet[4]=r5;remSet[5]=r6;remSet[6]=r7;remSet[7]=r8;
        remSet[8]=r9;remSet[9]=r10;
        //Labels
        labSet= gcnew array< Label^ >(10);
        labSet[0]=n1;labSet[1]=n2;labSet[2]=n3;labSet[3]=n4;
        labSet[4]=n5;labSet[5]=n6;labSet[6]=n7;labSet[7]=n8;
        labSet[8]=n9;labSet[9]=n10;

        StreamReader^ sr = gcnew
StreamReader(Application)::ExecutablePath->Replace("fMOLE.exe", "user\\tFriends.ms"));
        int cf= System::Convert::ToInt16(sr->ReadLine()-
>Substring(5));
        int ucf = System::Convert::ToInt16(sr->ReadLine()-
>Substring(6));
        int count = cf+ucf;
        String^ result1,^result2,^result3;
        showC=cf-1;
        showR = ucf;
        if(showR >5){
            showR = 5;
        }
        reqNo->Text = "You have "+showR+ " Friend Request(s)";
        while(count != 0){
            result1=sr->ReadLine();
            result2=sr->ReadLine();
            result3=sr->ReadLine()->Substring(6);

```

```

        if(result1->StartsWith("FUser")){
            if(result2->Equals("Confirm = Y")){
                labSet[showC]->Text = result1-
>Substring(8);
                labSet[showC]->Visible=true;
                remSet[showC]->Visible=true;
                try{
                    picSet[showC]-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe","user\\friends\\"+labSet[showC]->Text));
                }catch(Exception^ e){
                    picSet[showC]-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe","core\\female.mi"));
                }
                picSet[showC]->Visible=true;
                if(result3 == "Y"){
                    onlSet[showC]-
                }else{
                    onlSet[showC]-
                }
                showC--;
            }else{
                tim->Enabled=true;
                x=2;
                reqP->Visible=true;
                if(showR == 1){
                    req1->Visible=true;
                    requ1->Text = result1-
>Substring(8);
                    try{
                        reqi1-
                    }catch(Exception^ e){
                        reqi1-
                    }
                }else if(showR == 2){
                    req2->Visible=true;
                    requ2->Text = result1-
>Substring(8);
                    try{
                        reqi2-
                    }catch(Exception^ e){
                        reqi2-
                    }
                }else if(showR ==3){
                    req3->Visible=true;
                }
            }
        }
    }
}

```

```

    requ3->Text = result1-
>Substring(8);

    try{
        reqi3-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe", "user\\friends\\"+result1->Substring(8)));
        }catch(Exception^ e){
            reqi3-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe", "core\\female.mi"));
        }
    }else if(showR == 4){
        req4->Visible=true;
        requ4->Text = result1-
>Substring(8);

        try{
            reqi4-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe", "user\\friends\\"+result1->Substring(8)));
            }catch(Exception^ e){
                reqi4-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe", "core\\female.mi"));
            }
        }else if(showR == 5){
            req5->Visible=true;
            requ5->Text = result1-
>Substring(8);

            try{
                reqi5-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe", "user\\friends\\"+result1->Substring(8)));
                }catch(Exception^ e){
                    reqi5-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe", "core\\female.mi"));
                }
            }showR--;
        }
    }
    count--;
}
setPImage(cf);
sr->Close();
}

void funCreate(int a, String^ b, String^ c){
    StreamWriter^ sw = gcnew StreamWriter( Application::ExecutablePath-
>Replace("fMOLE.exe", "user\\mFriend.ms"));
    sw->WriteLine("FUser = "+b);
    sw->WriteLine("AddU = "+a);
    sw->WriteLine("Fun = "+c);
    sw->Close();
}

void addF(String^ u){
    try{
        funCreate(3, u, "A");
    }
}

```

```

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("fMOLE.exe","mFriend.jar"))->WaitForExit();
    setSearch(2, searchT->Text);

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("fMOLE.exe","mFriend.jar"))->WaitForExit();
    Application::Restart();
}catch(Exception^ e){
    MessageBox::Show("We Encountered a Problem. " + e->Message +
Environment::NewLine+"1. Check you Connection and Try Again"+Environment::NewLine+ "2.
Try reinstalling the Application", "MOLE Advisor");
}
}

void removeF(String^ u){
try{
    funCreate(3, u, "R");

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("fMOLE.exe","mFriend.jar"))->WaitForExit();
    setSearch(2, searchT->Text);

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("fMOLE.exe","mFriend.jar"))->WaitForExit();
    Application::Restart();
}catch(Exception^ e){
    MessageBox::Show("We Encountered a Problem. " + e->Message +
Environment::NewLine+"1. Check you Connection and Try Again"+Environment::NewLine+ "2.
Try reinstalling the Application", "MOLE Advisor");
}
}

void setPImage(int i){
    for(int a=i; a<pSet->Length;a++){
        pSet[a]-
>BackgroundImage=System::Drawing::Image::FromFile(path+"nofriends.mi");
    }
}

int x;
baseF(void)
{
    InitializeComponent();
    try{
        loadContent lc;
        lc.Show();
        StreamReader^ details = gcnew
StreamReader(Application::ExecutablePath->Replace("fMOLE.exe","user\\details.ms"));
        String^ fname=details->ReadLine()->Substring(8);
        String^ lname=details->ReadLine()->Substring(7);
        this->Text=fname + " " + lname +'s Friends';
        details->Close();

        path = Application::ExecutablePath-
>Replace("fMOLE.exe","core\\\"");
        setPanels();

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("fMOLE.exe","mFriend.jar"))->WaitForExit();
        lc.Close();
    }
}

```

```

        }catch(Exception^ e){
            MessageBox::Show("We Encountered a Problem. " + e-
>Message + Environment::NewLine+"1. Check you Connection and Try
Again"+Environment::NewLine+ "2. Try reinstalling the Application", "MOLE Advisor");
            this->Close();
        }
    }
protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
~baseF()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::Panel^ panel1;
protected:

private: System::Windows::Forms::Label^ name;
private: System::Windows::Forms::TextBox^ searchT;

private: System::Windows::Forms::ToolTip^ ttip;
private: System::Windows::Forms::Label^ label1;
private: System::Windows::Forms::Button^ search;
private: System::Windows::Forms::Panel^ panel2;
private: System::Windows::Forms::Panel^ f1;
private: System::Windows::Forms::Panel^ f4;

private: System::Windows::Forms::Panel^ f3;
private: System::Windows::Forms::Panel^ f2;
private: System::Windows::Forms::Panel^ f7;

private: System::Windows::Forms::Panel^ f6;
private: System::Windows::Forms::Panel^ f8;
private: System::Windows::Forms::Panel^ f10;

private: System::Windows::Forms::Panel^ f9;
private: System::Windows::Forms::Panel^ f5;
private: System::Windows::Forms::PictureBox^ r2;

private: System::Windows::Forms::LinkLabel^ n2;
private: System::Windows::Forms::PictureBox^ p2;
private: System::Windows::Forms::LinkLabel^ n7;

private: System::Windows::Forms::PictureBox^ p7;
private: System::Windows::Forms::PictureBox^ r7;

```

```
private: System::Windows::Forms::LinkLabel^  n6;

private: System::Windows::Forms::PictureBox^  p6;
private: System::Windows::Forms::PictureBox^  r6;

private: System::Windows::Forms::LinkLabel^  n8;

private: System::Windows::Forms::PictureBox^  r8;

private: System::Windows::Forms::LinkLabel^  n9;

private: System::Windows::Forms::PictureBox^  p9;
private: System::Windows::Forms::PictureBox^  r9;

private: System::Windows::Forms::LinkLabel^  n5;

private: System::Windows::Forms::PictureBox^  p5;
private: System::Windows::Forms::PictureBox^  r5;

private: System::Windows::Forms::LinkLabel^  n4;

private: System::Windows::Forms::PictureBox^  p4;
private: System::Windows::Forms::PictureBox^  r4;

private: System::Windows::Forms::LinkLabel^  n3;

private: System::Windows::Forms::PictureBox^  p3;
private: System::Windows::Forms::PictureBox^  r3;

private: System::Windows::Forms::LinkLabel^  n1;

private: System::Windows::Forms::PictureBox^  p1;
private: System::Windows::Forms::PictureBox^  r1;

private: System::Windows::Forms::LinkLabel^  n10;

private: System::Windows::Forms::PictureBox^  p10;
private: System::Windows::Forms::PictureBox^  r10;
private: System::Windows::Forms::PictureBox^  o2;
private: System::Windows::Forms::PictureBox^  o10;

private: System::Windows::Forms::PictureBox^  o9;
```

```

private: System::Windows::Forms::PictureBox^ o8;
private: System::Windows::Forms::PictureBox^ o7;
private: System::Windows::Forms::PictureBox^ o6;
private: System::Windows::Forms::PictureBox^ o5;
private: System::Windows::Forms::PictureBox^ o4;
private: System::Windows::Forms::PictureBox^ o3;
private: System::Windows::Forms::PictureBox^ p8;

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

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(baseF::typeid));
        this->panel1 = (gcnew System::Windows::Forms::Panel());
        this->reqP = (gcnew System::Windows::Forms::PictureBox());
        this->label1 = (gcnew System::Windows::Forms::Label());
        this->searchT = (gcnew System::Windows::Forms::TextBox());
        this->search = (gcnew System::Windows::Forms::Button());
        this->name = (gcnew System::Windows::Forms::Label());
        this->tTip = (gcnew System::Windows::Forms::ToolTip(this-
>components));
        this->r2 = (gcnew System::Windows::Forms::PictureBox());
        this->p2 = (gcnew System::Windows::Forms::PictureBox());
        this->n2 = (gcnew System::Windows::Forms::LinkLabel());
        this->n3 = (gcnew System::Windows::Forms::LinkLabel());
        this->p3 = (gcnew System::Windows::Forms::PictureBox());
        this->r3 = (gcnew System::Windows::Forms::PictureBox());
        this->n4 = (gcnew System::Windows::Forms::LinkLabel());
        this->p4 = (gcnew System::Windows::Forms::PictureBox());
        this->r4 = (gcnew System::Windows::Forms::PictureBox());
        this->n8 = (gcnew System::Windows::Forms::LinkLabel());
        this->r8 = (gcnew System::Windows::Forms::PictureBox());
        this->n7 = (gcnew System::Windows::Forms::LinkLabel());
        this->p7 = (gcnew System::Windows::Forms::PictureBox());
        this->r7 = (gcnew System::Windows::Forms::PictureBox());

```



```

this->label7 = (gcnew System::Windows::Forms::Label());
this->label8 = (gcnew System::Windows::Forms::Label());
this->pictureBox15 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox16 = (gcnew System::Windows::Forms::PictureBox());
this->panel2 = (gcnew System::Windows::Forms::Panel());
this->f7 = (gcnew System::Windows::Forms::Panel());
this->f6 = (gcnew System::Windows::Forms::Panel());
this->f8 = (gcnew System::Windows::Forms::Panel());
this->f10 = (gcnew System::Windows::Forms::Panel());
this->f9 = (gcnew System::Windows::Forms::Panel());
this->f5 = (gcnew System::Windows::Forms::Panel());
this->f4 = (gcnew System::Windows::Forms::Panel());
this->f3 = (gcnew System::Windows::Forms::Panel());
this->f2 = (gcnew System::Windows::Forms::Panel());
this->f1 = (gcnew System::Windows::Forms::Panel());
this->reqPanel = (gcnew System::Windows::Forms::Panel());
this->req5 = (gcnew System::Windows::Forms::Panel());
this->req4 = (gcnew System::Windows::Forms::Panel());
this->reqNo = (gcnew System::Windows::Forms::Label());
this->req3 = (gcnew System::Windows::Forms::Panel());
this->req2 = (gcnew System::Windows::Forms::Panel());
this->label2 = (gcnew System::Windows::Forms::Label());
this->req1 = (gcnew System::Windows::Forms::Panel());
this->tim = (gcnew System::Windows::Forms::Timer(this->components));
this->panel1->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->reqP))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r2))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p2))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p3))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r3))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p4))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r4))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r8))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p7))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r7))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p6))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r6))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p1))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r1))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p5))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r5))->BeginInit();

```



```

        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox15))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox16))->BeginInit();
        this->panel2->SuspendLayout();
        this->f7->SuspendLayout();
        this->f6->SuspendLayout();
        this->f8->SuspendLayout();
        this->f10->SuspendLayout();
        this->f9->SuspendLayout();
        this->f5->SuspendLayout();
        this->f4->SuspendLayout();
        this->f3->SuspendLayout();
        this->f2->SuspendLayout();
        this->f1->SuspendLayout();
        this->reqPanel->SuspendLayout();
        this->req5->SuspendLayout();
        this->req4->SuspendLayout();
        this->req3->SuspendLayout();
        this->req2->SuspendLayout();
        this->req1->SuspendLayout();
        this->SuspendLayout();
        //
        // panel1
        //
        this->panel1->BackColor = System::Drawing::Color::Transparent;
        this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
        this->panel1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->panel1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->panel1->Controls->Add(this->reqP);
        this->panel1->Controls->Add(this->label1);
        this->panel1->Controls->Add(this->searchT);
        this->panel1->Controls->Add(this->search);
        this->panel1->Controls->Add(this->name);
        this->panel1->Location = System::Drawing::Point(-1, -1);
        this->panel1->Name = L"panel1";
        this->panel1->Size = System::Drawing::Size(699, 58);
        this->panel1->TabIndex = 1;
        //
        // reqP
        //
        this->reqP->BackColor = System::Drawing::Color::DarkSlateGray;
        this->reqP->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"reqP.BackgroundImage")));
        this->reqP->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->reqP->Cursor = System::Windows::Forms::Cursors::Hand;
        this->reqP->Location = System::Drawing::Point(641, 10);
        this->reqP->Name = L"reqP";
        this->reqP->Size = System::Drawing::Size(35, 35);
        this->reqP->TabIndex = 6;
        this->reqP->TabStop = false;
        this->toltip->SetToolTip(this->reqP, L"You have Friend Request(s)");
```

```

        this->reqP->Visible = false;
        this->reqP->Click += gcnew System::EventHandler(this,
&baseF::reqP_Click);
        //
        // label1
        //
        this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Italic, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label1->ForeColor = System::Drawing::Color::Black;
        this->label1->Location = System::Drawing::Point(170, 8);
        this->label1->Name = L"label1";
        this->label1->Size = System::Drawing::Size(226, 17);
        this->label1->TabIndex = 5;
        this->label1->Text = L"Enter his/her Username to Search";
        //
        // searchT
        //
        this->searchT->BackColor = System::Drawing::Color::DarkSlateGray;
        this->searchT->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->searchT->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->searchT->ForeColor = System::Drawing::Color::White;
        this->searchT->Location = System::Drawing::Point(171, 25);
        this->searchT->MaxLength = 50;
        this->searchT->Name = L"searchT";
        this->searchT->Size = System::Drawing::Size(317, 21);
        this->searchT->TabIndex = 4;
        this->ttip->SetToolTip(this->searchT, L"Enter his/her Username to
Search");
        //
        // search
        //
        this->search->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"search.BackgroundImage")));
        this->search->Cursor = System::Windows::Forms::Cursors::Hand;
        this->search->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->search->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->search->ForeColor = System::Drawing::Color::Black;
        this->search->Location = System::Drawing::Point(494, 23);
        this->search->Name = L"search";
        this->search->Size = System::Drawing::Size(126, 23);
        this->search->TabIndex = 3;
        this->search->Text = L"Search";
        this->ttip->SetToolTip(this->search, L"Click to Search for a
Friend");
        this->search->UseVisualStyleBackColor = true;
        this->search->Click += gcnew System::EventHandler(this,
&baseF::search_Click);
        //
        // name
        //

```

```

        this->name->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
        this->name->ForeColor = System::Drawing::Color::Black;
        this->name->Location = System::Drawing::Point(29, 25);
        this->name->Name = L"name";
        this->name->Size = System::Drawing::Size(141, 18);
        this->name->TabIndex = 1;
        this->name->Text = L"Search for a Friend";
        this->name-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
        //
        // ttip
        //
        this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
        this->ttip->ForeColor = System::Drawing::Color::White;
        this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
        this->ttip->ToolTipTitle = L"MOLE Advisor";
        //
        // r2
        //
        this->r2->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"r2.BackgroundImage")));
        this->r2->Cursor = System::Windows::Forms::Cursors::Hand;
        this->r2->Location = System::Drawing::Point(1, 118);
        this->r2->Name = L"r2";
        this->r2->Size = System::Drawing::Size(126, 14);
        this->r2->TabIndex = 0;
        this->r2->TabStop = false;
        this->ttip->SetToolTip(this->r2, L"Click to Remove this Friend");
        this->r2->Visible = false;
        this->r2->Click += gcnew System::EventHandler(this,
&baseF::r2_Click);
        //
        // p2
        //
        this->p2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p2->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p2->Location = System::Drawing::Point(0, 0);
        this->p2->Name = L"p2";
        this->p2->Size = System::Drawing::Size(128, 91);
        this->p2->TabIndex = 1;
        this->p2->TabStop = false;
        this->ttip->SetToolTip(this->p2, L"Your Friend\`s Profile Image");
        this->p2->Visible = false;
        //
        // n2
        //
        this->n2->Cursor = System::Windows::Forms::Cursors::Hand;
        this->n2->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
        this->n2->LinkColor = System::Drawing::Color::White;
        this->n2->Location = System::Drawing::Point(3, 92);
        this->n2->Name = L"n2";
        this->n2->Size = System::Drawing::Size(122, 23);
        this->n2->TabIndex = 2;
        this->n2->TabStop = true;

```

```

        this->n2->Text = L"Basura";
        this->n2->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->n2, L"Your Friend\`s Username, Click to
See the Full Profile\r\n");
        this->n2->Visible = false;
//
// n3
//
this->n3->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
this->n3->LinkColor = System::Drawing::Color::White;
this->n3->Location = System::Drawing::Point(3, 92);
this->n3->Name = L"n3";
this->n3->Size = System::Drawing::Size(122, 23);
this->n3->TabIndex = 5;
this->n3->TabStop = true;
this->n3->Text = L"Basura";
this->n3->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->n3, L"Your Friend\`s Username, Click to
See the Full Profile\r\n");
        this->n3->Visible = false;
//
// p3
//
this->p3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->p3->Location = System::Drawing::Point(0, 0);
this->p3->Name = L"p3";
this->p3->Size = System::Drawing::Size(128, 91);
this->p3->TabIndex = 4;
this->p3->TabStop = false;
this->ttip->SetToolTip(this->p3, L"Your Friend\`s Profile Image");
this->p3->Visible = false;
//
// r3
//
this->r3->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"r3.BackgroundImage")));
this->r3->Cursor = System::Windows::Forms::Cursors::Hand;
this->r3->Location = System::Drawing::Point(1, 118);
this->r3->Name = L"r3";
this->r3->Size = System::Drawing::Size(126, 14);
this->r3->TabIndex = 3;
this->r3->TabStop = false;
this->ttip->SetToolTip(this->r3, L"Click to Remove this Friend");
this->r3->Visible = false;
this->r3->Click += gcnew System::EventHandler(this,
&baseF::r3_Click);
//
// n4
//
this->n4->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
this->n4->LinkColor = System::Drawing::Color::White;
this->n4->Location = System::Drawing::Point(3, 92);
this->n4->Name = L"n4";

```

```

this->n4->Size = System::Drawing::Size(122, 23);
this->n4->TabIndex = 5;
this->n4->TabStop = true;
this->n4->Text = L"Basura";
this->n4->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    this->ttip->SetToolTip(this->n4, L"Your Friend\`s Username, Click to
See the Full Profile\r\n");
    this->n4->Visible = false;
//
// p4
//
    this->p4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->p4->Location = System::Drawing::Point(0, 0);
    this->p4->Name = L"p4";
    this->p4->Size = System::Drawing::Size(128, 91);
    this->p4->TabIndex = 4;
    this->p4->TabStop = false;
    this->ttip->SetToolTip(this->p4, L"Your Friend\`s Profile Image");
    this->p4->Visible = false;
//
// r4
//
    this->r4->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"r4.BackgroundImage")));
    this->r4->Cursor = System::Windows::Forms::Cursors::Hand;
    this->r4->Location = System::Drawing::Point(1, 118);
    this->r4->Name = L"r4";
    this->r4->Size = System::Drawing::Size(126, 14);
    this->r4->TabIndex = 3;
    this->r4->TabStop = false;
    this->ttip->SetToolTip(this->r4, L"Click to Remove this Friend");
    this->r4->Visible = false;
    this->r4->Click += gcnew System::EventHandler(this,
&baseF::r4_Click);
//
// n8
//
    this->n8->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
    this->n8->LinkColor = System::Drawing::Color::White;
    this->n8->Location = System::Drawing::Point(3, 92);
    this->n8->Name = L"n8";
    this->n8->Size = System::Drawing::Size(122, 23);
    this->n8->TabIndex = 5;
    this->n8->TabStop = true;
    this->n8->Text = L"Basura";
    this->n8->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    this->ttip->SetToolTip(this->n8, L"Your Friend\`s Username, Click to
See the Full Profile\r\n");
    this->n8->Visible = false;
//
// r8
//
    this->r8->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"r8.BackgroundImage")));

```

```

        this->r8->Cursor = System::Windows::Forms::Cursors::Hand;
        this->r8->Location = System::Drawing::Point(1, 118);
        this->r8->Name = L"r8";
        this->r8->Size = System::Drawing::Size(126, 14);
        this->r8->TabIndex = 3;
        this->r8->TabStop = false;
        this->ttip->SetToolTip(this->r8, L"Click to Remove this Friend");
        this->r8->Visible = false;
        this->r8->Click += gcnew System::EventHandler(this,
&baseF::r8_Click);
        //
        // n7
        //
        this->n7->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
        this->n7->LinkColor = System::Drawing::Color::White;
        this->n7->Location = System::Drawing::Point(3, 92);
        this->n7->Name = L"n7";
        this->n7->Size = System::Drawing::Size(122, 23);
        this->n7->TabIndex = 5;
        this->n7->TabStop = true;
        this->n7->Text = L"Basura";
        this->n7-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->n7, L"Your Friend\`s Username, Click to
See the Full Profile\r\n");
        this->n7->Visible = false;
        //
        // p7
        //
        this->p7->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p7->Location = System::Drawing::Point(0, 0);
        this->p7->Name = L"p7";
        this->p7->Size = System::Drawing::Size(128, 91);
        this->p7->TabIndex = 4;
        this->p7->TabStop = false;
        this->ttip->SetToolTip(this->p7, L"Your Friend\`s Profile Image");
        this->p7->Visible = false;
        //
        // r7
        //
        this->r7->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"r7.BackgroundImage")));
        this->r7->Cursor = System::Windows::Forms::Cursors::Hand;
        this->r7->Location = System::Drawing::Point(1, 118);
        this->r7->Name = L"r7";
        this->r7->Size = System::Drawing::Size(126, 14);
        this->r7->TabIndex = 3;
        this->r7->TabStop = false;
        this->ttip->SetToolTip(this->r7, L"Click to Remove this Friend");
        this->r7->Visible = false;
        this->r7->Click += gcnew System::EventHandler(this,
&baseF::r7_Click);
        //
        // n6
        //

```

```

        this->n6->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
        this->n6->LinkColor = System::Drawing::Color::White;
        this->n6->Location = System::Drawing::Point(3, 92);
        this->n6->Name = L"n6";
        this->n6->Size = System::Drawing::Size(122, 23);
        this->n6->TabIndex = 5;
        this->n6->TabStop = true;
        this->n6->Text = L"Basura";
        this->n6->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->n6, L"Your Friend's Username, Click to
See the Full Profile\r\n");
        this->n6->Visible = false;
//
// p6
//
        this->p6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p6->Location = System::Drawing::Point(0, 0);
        this->p6->Name = L"p6";
        this->p6->Size = System::Drawing::Size(128, 91);
        this->p6->TabIndex = 4;
        this->p6->TabStop = false;
        this->ttip->SetToolTip(this->p6, L"Your Friend's Profile Image");
        this->p6->Visible = false;
//
// r6
//
        this->r6->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"r6.BackgroundImage")));
        this->r6->Cursor = System::Windows::Forms::.Cursors::Hand;
        this->r6->Location = System::Drawing::Point(1, 118);
        this->r6->Name = L"r6";
        this->r6->Size = System::Drawing::Size(126, 14);
        this->r6->TabIndex = 3;
        this->r6->TabStop = false;
        this->ttip->SetToolTip(this->r6, L"Click to Remove this Friend");
        this->r6->Visible = false;
        this->r6->Click += gcnew System::EventHandler(this,
&baseF::r6_Click);
//
// n1
//
        this->n1->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
        this->n1->LinkColor = System::Drawing::Color::White;
        this->n1->Location = System::Drawing::Point(3, 92);
        this->n1->Name = L"n1";
        this->n1->Size = System::Drawing::Size(122, 23);
        this->n1->TabIndex = 5;
        this->n1->TabStop = true;
        this->n1->Text = L"Basura";
        this->n1->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->n1, L"Your Friend's Username, Click to
See the Full Profile\r\n");
        this->n1->Visible = false;

```

```

//  

// p1  

//  

this->p1->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->p1->Location = System::Drawing::Point(0, 0);  

this->p1->Name = L"p1";  

this->p1->Size = System::Drawing::Size(128, 91);  

this->p1->TabIndex = 4;  

this->p1->TabStop = false;  

this->ttip->SetToolTip(this->p1, L"Your Friend's Profile Image");  

this->p1->Visible = false;  

//  

// r1  

//  

this->r1->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"r1.BackgroundImage")));  

this->r1->Cursor = System::Windows::Forms::Cursors::Hand;  

this->r1->Location = System::Drawing::Point(1, 118);  

this->r1->Name = L"r1";  

this->r1->Size = System::Drawing::Size(126, 14);  

this->r1->TabIndex = 3;  

this->r1->TabStop = false;  

this->ttip->SetToolTip(this->r1, L"Click to Remove this Friend");  

this->r1->Visible = false;  

this->r1->Click += gcnew System::EventHandler(this,  

&baseF::r1_Click);  

//  

// n5  

//  

this->n5->LinkBehavior =  

System::Windows::Forms::LinkBehavior::HoverUnderline;  

this->n5->LinkColor = System::Drawing::Color::White;  

this->n5->Location = System::Drawing::Point(3, 92);  

this->n5->Name = L"n5";  

this->n5->Size = System::Drawing::Size(122, 23);  

this->n5->TabIndex = 5;  

this->n5->TabStop = true;  

this->n5->Text = L"Basura";  

this->n5-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

this->ttip->SetToolTip(this->n5, L"Your Friend's Username, Click to  

See the Full Profile\r\n");  

this->n5->Visible = false;  

//  

// p5  

//  

this->p5->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->p5->Location = System::Drawing::Point(0, 0);  

this->p5->Name = L"p5";  

this->p5->Size = System::Drawing::Size(128, 91);  

this->p5->TabIndex = 4;  

this->p5->TabStop = false;  

this->ttip->SetToolTip(this->p5, L"Your Friend's Profile Image");  

this->p5->Visible = false;  

//  

// r5

```

```

//  

this->r5->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"r5.BackgroundImage")));  

this->r5->Cursor = System::Windows::Forms::Cursors::Hand;  

this->r5->Location = System::Drawing::Point(1, 118);  

this->r5->Name = L"r5";  

this->r5->Size = System::Drawing::Size(126, 14);  

this->r5->TabIndex = 3;  

this->r5->TabStop = false;  

this->ttip->SetToolTip(this->r5, L"Click to Remove this Friend");  

this->r5->Visible = false;  

this->r5->Click += gcnew System::EventHandler(this,  

&baseF::r5_Click);  

//  

// n9  

//  

this->n9->LinkBehavior =  

System::Windows::Forms::LinkBehavior::HoverUnderline;  

this->n9->LinkColor = System::Drawing::Color::White;  

this->n9->Location = System::Drawing::Point(3, 92);  

this->n9->Name = L"n9";  

this->n9->Size = System::Drawing::Size(122, 23);  

this->n9->TabIndex = 5;  

this->n9->TabStop = true;  

this->n9->Text = L"Basura";  

this->n9-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

this->ttip->SetToolTip(this->n9, L"Your Friend\\'s Username, Click to  

See the Full Profile\r\n");  

this->n9->Visible = false;  

//  

// p9  

//  

this->p9->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->p9->Location = System::Drawing::Point(0, 0);  

this->p9->Name = L"p9";  

this->p9->Size = System::Drawing::Size(128, 91);  

this->p9->TabIndex = 4;  

this->p9->TabStop = false;  

this->ttip->SetToolTip(this->p9, L"Your Friend\\'s Profile Image");  

this->p9->Visible = false;  

//  

// r9  

//  

this->r9->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"r9.BackgroundImage")));  

this->r9->Cursor = System::Windows::Forms::Cursors::Hand;  

this->r9->Location = System::Drawing::Point(1, 118);  

this->r9->Name = L"r9";  

this->r9->Size = System::Drawing::Size(126, 14);  

this->r9->TabIndex = 3;  

this->r9->TabStop = false;  

this->ttip->SetToolTip(this->r9, L"Click to Remove this Friend");  

this->r9->Visible = false;  

this->r9->Click += gcnew System::EventHandler(this,  

&baseF::r9_Click);  

//

```

```

// n10
//
this->n10->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
this->n10->LinkColor = System::Drawing::Color::White;
this->n10->Location = System::Drawing::Point(3, 92);
this->n10->Name = L"n10";
this->n10->Size = System::Drawing::Size(122, 23);
this->n10->TabIndex = 5;
this->n10->TabStop = true;
this->n10->Text = L"Basura";
this->n10-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
this->ttip->SetToolTip(this->n10, L"Your Friend's Username, Click
to See the Full Profile\r\n");
this->n10->Visible = false;
//
// p10
//
this->p10->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->p10->Location = System::Drawing::Point(0, 0);
this->p10->Name = L"p10";
this->p10->Size = System::Drawing::Size(128, 91);
this->p10->TabIndex = 4;
this->p10->TabStop = false;
this->ttip->SetToolTip(this->p10, L"Your Friend's Profile Image");
this->p10->Visible = false;
//
// r10
//
this->r10->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"r10.BackgroundImage")));
this->r10->Cursor = System::Windows::Forms::Cursors::Hand;
this->r10->Location = System::Drawing::Point(1, 118);
this->r10->Name = L"r10";
this->r10->Size = System::Drawing::Size(126, 14);
this->r10->TabIndex = 3;
this->r10->TabStop = false;
this->ttip->SetToolTip(this->r10, L"Click to Remove this Friend");
this->r10->Visible = false;
this->r10->Click += gcnew System::EventHandler(this,
&baseF::r10_Click);
//
// o1
//
this->o1->BackColor = System::Drawing::Color::Transparent;
this->o1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->o1->Location = System::Drawing::Point(139, 9);
this->o1->Name = L"o1";
this->o1->Size = System::Drawing::Size(20, 20);
this->o1->TabIndex = 10;
this->o1->TabStop = false;
this->ttip->SetToolTip(this->o1, L"Green - Your Friend is
Online\r\nRed - Your Friend is Offline");
//
// o2

```

```

//  

this->o2->BackColor = System::Drawing::Color::Transparent;  

this->o2->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->o2->Location = System::Drawing::Point(306, 9);  

this->o2->Name = L"o2";  

this->o2->Size = System::Drawing::Size(20, 20);  

this->o2->TabIndex = 11;  

this->o2->TabStop = false;  

this->ttip->SetToolTip(this->o2, L"Green - Your Friend is  

Online\r\nRed - Your Friend is Offline");  

//  

// o3  

//  

this->o3->BackColor = System::Drawing::Color::Transparent;  

this->o3->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->o3->Location = System::Drawing::Point(473, 9);  

this->o3->Name = L"o3";  

this->o3->Size = System::Drawing::Size(20, 20);  

this->o3->TabIndex = 12;  

this->o3->TabStop = false;  

this->ttip->SetToolTip(this->o3, L"Green - Your Friend is  

Online\r\nRed - Your Friend is Offline");  

//  

// o4  

//  

this->o4->BackColor = System::Drawing::Color::Transparent;  

this->o4->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->o4->Location = System::Drawing::Point(640, 9);  

this->o4->Name = L"o4";  

this->o4->Size = System::Drawing::Size(20, 20);  

this->o4->TabIndex = 13;  

this->o4->TabStop = false;  

this->ttip->SetToolTip(this->o4, L"Green - Your Friend is  

Online\r\nRed - Your Friend is Offline");  

//  

// o8  

//  

this->o8->BackColor = System::Drawing::Color::Transparent;  

this->o8->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->o8->Location = System::Drawing::Point(640, 149);  

this->o8->Name = L"o8";  

this->o8->Size = System::Drawing::Size(20, 20);  

this->o8->TabIndex = 17;  

this->o8->TabStop = false;  

this->ttip->SetToolTip(this->o8, L"Green - Your Friend is  

Online\r\nRed - Your Friend is Offline");  

//  

// o7  

//  

this->o7->BackColor = System::Drawing::Color::Transparent;  

this->o7->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->o7->Location = System::Drawing::Point(473, 149);  

this->o7->Name = L"o7";

```

```

        this->o7->Size = System::Drawing::Size(20, 20);
        this->o7->TabIndex = 16;
        this->o7->TabStop = false;
        this->ttip->SetToolTip(this->o7, L"Green - Your Friend is
Online\r\nRed - Your Friend is Offline");
    //
    // o6
    //
    this->o6->BackColor = System::Drawing::Color::Transparent;
    this->o6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->o6->Location = System::Drawing::Point(306, 149);
    this->o6->Name = L"o6";
    this->o6->Size = System::Drawing::Size(20, 20);
    this->o6->TabIndex = 15;
    this->o6->TabStop = false;
    this->ttip->SetToolTip(this->o6, L"Green - Your Friend is
Online\r\nRed - Your Friend is Offline");
    //
    // o5
    //
    this->o5->BackColor = System::Drawing::Color::Transparent;
    this->o5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->o5->Location = System::Drawing::Point(139, 149);
    this->o5->Name = L"o5";
    this->o5->Size = System::Drawing::Size(20, 20);
    this->o5->TabIndex = 14;
    this->o5->TabStop = false;
    this->ttip->SetToolTip(this->o5, L"Green - Your Friend is
Online\r\nRed - Your Friend is Offline");
    //
    // o10
    //
    this->o10->BackColor = System::Drawing::Color::Transparent;
    this->o10->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->o10->Location = System::Drawing::Point(473, 288);
    this->o10->Name = L"o10";
    this->o10->Size = System::Drawing::Size(20, 20);
    this->o10->TabIndex = 19;
    this->o10->TabStop = false;
    this->ttip->SetToolTip(this->o10, L"Green - Your Friend is
Online\r\nRed - Your Friend is Offline");
    //
    // o9
    //
    this->o9->BackColor = System::Drawing::Color::Transparent;
    this->o9->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->o9->Location = System::Drawing::Point(306, 288);
    this->o9->Name = L"o9";
    this->o9->Size = System::Drawing::Size(20, 20);
    this->o9->TabIndex = 18;
    this->o9->TabStop = false;
    this->ttip->SetToolTip(this->o9, L"Green - Your Friend is
Online\r\nRed - Your Friend is Offline");
    //

```

```

// p8
//
this->p8->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->p8->Location = System::Drawing::Point(0, 0);
this->p8->Name = L"p8";
this->p8->Size = System::Drawing::Size(128, 91);
this->p8->TabIndex = 6;
this->p8->TabStop = false;
this->ttip->SetToolTip(this->p8, L"Your Friend's Profile Image");
this->p8->Visible = true;
//
// pictureBox1
//
this->pictureBox1->BackColor = System::Drawing::Color::DarkRed;
this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
this->pictureBox1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->pictureBox1->Cursor = System::Windows::Forms::Cursors::Hand;
this->pictureBox1->Location = System::Drawing::Point(309, 1);
this->pictureBox1->Name = L"pictureBox1";
this->pictureBox1->Size = System::Drawing::Size(21, 16);
this->pictureBox1->TabIndex = 3;
this->pictureBox1->TabStop = false;
this->ttip->SetToolTip(this->pictureBox1, L"Close Notifications");
this->pictureBox1->Click += gcnew System::EventHandler(this,
&baseF::pictureBox1_Click);
//
// label13
//
this->label13->BackColor = System::Drawing::Color::Teal;
this->label13->Cursor = System::Windows::Forms::Cursors::Hand;
this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label13->ForeColor = System::Drawing::Color::Black;
this->label13->Location = System::Drawing::Point(137, 54);
this->label13->Name = L"label13";
this->label13->Size = System::Drawing::Size(72, 30);
this->label13->TabIndex = 11;
this->label13->Text = L"Accept";
this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
this->ttip->SetToolTip(this->label13, L"I know this person. Accept
this person as a friend of mine.");
this->label13->Click += gcnew System::EventHandler(this,
&baseF::pictureBox10_Click);
//
// label14
//
this->label14->BackColor = System::Drawing::Color::Maroon;
this->label14->Cursor = System::Windows::Forms::Cursors::Hand;
this->label14->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label14->ForeColor = System::Drawing::Color::White;

```

```

        this->label14->Location = System::Drawing::Point(244, 54);
        this->label14->Name = L"label14";
        this->label14->Size = System::Drawing::Size(72, 30);
        this->label14->TabIndex = 10;
        this->label14->Text = L"Decline";
        this->label14-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->label14, L"I don't know this person.
Decline this person.");
        this->label14->Click += gcnew System::EventHandler(this,
&baseF::pictureBox9_Click);
        //
        // pictureBox9
        //
        this->pictureBox9->BackColor = System::Drawing::Color::Maroon;
        this->pictureBox9->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox9.BackgroundImage")));
        this->pictureBox9->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox9->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox9->Location = System::Drawing::Point(214, 54);
        this->pictureBox9->Name = L"pictureBox9";
        this->pictureBox9->Size = System::Drawing::Size(30, 30);
        this->pictureBox9->TabIndex = 7;
        this->pictureBox9->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox9, L"I don't know this
person. Decline this person.");
        this->pictureBox9->Click += gcnew System::EventHandler(this,
&baseF::pictureBox9_Click);
        //
        // pictureBox10
        //
        this->pictureBox10->BackColor = System::Drawing::Color::Teal;
        this->pictureBox10->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox10.BackgroundImage")));
        this->pictureBox10->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox10->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox10->Location = System::Drawing::Point(107, 54);
        this->pictureBox10->Name = L"pictureBox10";
        this->pictureBox10->Size = System::Drawing::Size(30, 30);
        this->pictureBox10->TabIndex = 6;
        this->pictureBox10->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox10, L"I know this person.
Accept this person as a friend of mine.");
        this->pictureBox10->Click += gcnew System::EventHandler(this,
&baseF::pictureBox10_Click);
        //
        // label9
        //
        this->label9->BackColor = System::Drawing::Color::Teal;
        this->label9->Cursor = System::Windows::Forms::Cursors::Hand;
        this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label9->ForeColor = System::Drawing::Color::Black;

```

```

        this->label9->Location = System::Drawing::Point(137, 54);
        this->label9->Name = L"label9";
        this->label9->Size = System::Drawing::Size(72, 30);
        this->label9->TabIndex = 11;
        this->label9->Text = L"Accept";
        this->label9-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->label9, L"I know this person. Accept
this person as a friend of mine.");
        this->label9->Click += gcnew System::EventHandler(this,
&baseF::pictureBox5_Click);
        //
        // label10
        //
        this->label10->BackColor = System::Drawing::Color::Maroon;
        this->label10->Cursor = System::Windows::Forms::Cursors::Hand;
        this->label10->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label10->ForeColor = System::Drawing::Color::White;
        this->label10->Location = System::Drawing::Point(244, 54);
        this->label10->Name = L"label10";
        this->label10->Size = System::Drawing::Size(72, 30);
        this->label10->TabIndex = 10;
        this->label10->Text = L"Decline";
        this->label10-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->label10, L"I don't know this person.
Decline this person.");
        this->label10->Click += gcnew System::EventHandler(this,
&baseF::pictureBox4_Click);
        //
        // pictureBox4
        //
        this->pictureBox4->BackColor = System::Drawing::Color::Maroon;
        this->pictureBox4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox4.BackgroundImage")));
        this->pictureBox4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox4->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox4->Location = System::Drawing::Point(214, 54);
        this->pictureBox4->Name = L"pictureBox4";
        this->pictureBox4->Size = System::Drawing::Size(30, 30);
        this->pictureBox4->TabIndex = 7;
        this->pictureBox4->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox4, L"I don't know this
person. Decline this person.");
        this->pictureBox4->Click += gcnew System::EventHandler(this,
&baseF::pictureBox4_Click);
        //
        // pictureBox5
        //
        this->pictureBox5->BackColor = System::Drawing::Color::Teal;
        this->pictureBox5->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox5.BackgroundImage")));

```

```

        this->pictureBox5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox5->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox5->Location = System::Drawing::Point(107, 54);
        this->pictureBox5->Name = L"pictureBox5";
        this->pictureBox5->Size = System::Drawing::Size(30, 30);
        this->pictureBox5->TabIndex = 6;
        this->pictureBox5->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox5, L"I know this person.
Accept this person as a friend of mine.");
        this->pictureBox5->Click += gcnew System::EventHandler(this,
&baseF::pictureBox5_Click);
        //
        // label3
        //
        this->label3->BackColor = System::Drawing::Color::Teal;
        this->label3->Cursor = System::Windows::Forms::Cursors::Hand;
        this->label3->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label3->ForeColor = System::Drawing::Color::Black;
        this->label3->Location = System::Drawing::Point(137, 54);
        this->label3->Name = L"label3";
        this->label3->Size = System::Drawing::Size(72, 30);
        this->label3->TabIndex = 11;
        this->label3->Text = L"Accept";
        this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->label3, L"I know this person. Accept
this person as a friend of mine.");
        this->label3->Click += gcnew System::EventHandler(this,
&baseF::label3_Click);
        //
        // label4
        //
        this->label4->BackColor = System::Drawing::Color::Maroon;
        this->label4->Cursor = System::Windows::Forms::Cursors::Hand;
        this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label4->ForeColor = System::Drawing::Color::White;
        this->label4->Location = System::Drawing::Point(244, 54);
        this->label4->Name = L"label4";
        this->label4->Size = System::Drawing::Size(72, 30);
        this->label4->TabIndex = 10;
        this->label4->Text = L"Decline";
        this->label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->label4, L"I don't know this person.
Decline this person.");
        this->label4->Click += gcnew System::EventHandler(this,
&baseF::pictureBox6_Click);
        //
        // pictureBox6
        //
        this->pictureBox6->BackColor = System::Drawing::Color::Maroon;

```

```

        this->pictureBox6->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox6.BackgroundImage")));
        this->pictureBox6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox6->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox6->Location = System::Drawing::Point(214, 54);
        this->pictureBox6->Name = L"pictureBox6";
        this->pictureBox6->Size = System::Drawing::Size(30, 30);
        this->pictureBox6->TabIndex = 7;
        this->pictureBox6->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox6, L"I don't know this
person. Decline this person.");
        this->pictureBox6->Click += gcnew System::EventHandler(this,
&baseF::pictureBox6_Click);
        //
// pictureBox
//
        this->pictureBox7->BackColor = System::Drawing::Color::Teal;
        this->pictureBox7->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox7.BackgroundImage")));
        this->pictureBox7->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox7->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox7->Location = System::Drawing::Point(107, 54);
        this->pictureBox7->Name = L"pictureBox7";
        this->pictureBox7->Size = System::Drawing::Size(30, 30);
        this->pictureBox7->TabIndex = 6;
        this->pictureBox7->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox7, L"I know this person.
Accept this person as a friend of mine.");
        this->pictureBox7->Click += gcnew System::EventHandler(this,
&baseF::label3_Click);
        //
// reqs3
//
        this->reqs3->BackColor = System::Drawing::Color::Transparent;
        this->reqs3->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->reqs3->Location = System::Drawing::Point(105, 31);
        this->reqs3->Name = L"reqs3";
        this->reqs3->Size = System::Drawing::Size(210, 20);
        this->reqs3->TabIndex = 15;
        this->reqs3-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->reqs3, L"Your friend's School Name");
        //
// requ3
//
        this->requ3->BackColor = System::Drawing::Color::Transparent;
        this->requ3->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->requ3->Location = System::Drawing::Point(105, 6);
        this->requ3->Name = L"requ3";
        this->requ3->Size = System::Drawing::Size(210, 20);

```

```

        this->requ3->TabIndex = 14;
        this->requ3-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->requ3, L"Your Friend\''s Full Name");
        //
        // reqi3
        //
        this->reqi3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->reqi3->Location = System::Drawing::Point(4, 3);
        this->reqi3->Name = L"reqi3";
        this->reqi3->Size = System::Drawing::Size(100, 81);
        this->reqi3->TabIndex = 12;
        this->reqi3->TabStop = false;
        this->ttip->SetToolTip(this->reqi3, L"Your Friend\''s Profile
Image");
        //
        // reqs2
        //
        this->reqs2->BackColor = System::Drawing::Color::Transparent;
        this->reqs2->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->reqs2->Location = System::Drawing::Point(105, 31);
        this->reqs2->Name = L"reqs2";
        this->reqs2->Size = System::Drawing::Size(210, 20);
        this->reqs2->TabIndex = 15;
        this->reqs2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->reqs2, L"Your friend\''s School Name");
        //
        // requ2
        //
        this->requ2->BackColor = System::Drawing::Color::Transparent;
        this->requ2->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->requ2->Location = System::Drawing::Point(105, 6);
        this->requ2->Name = L"requ2";
        this->requ2->Size = System::Drawing::Size(210, 20);
        this->requ2->TabIndex = 14;
        this->requ2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->requ2, L"Your Friend\''s Full Name");
        //
        // reqi2
        //
        this->reqi2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->reqi2->Location = System::Drawing::Point(4, 3);
        this->reqi2->Name = L"reqi2";
        this->reqi2->Size = System::Drawing::Size(100, 81);
        this->reqi2->TabIndex = 12;
        this->reqi2->TabStop = false;
        this->ttip->SetToolTip(this->reqi2, L"Your Friend\''s Profile
Image");
        //
        // reqs1

```

```

//  

this->reqs1->BackColor = System::Drawing::Color::Transparent;  

this->reqs1->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->reqs1->Location = System::Drawing::Point(105, 31);  

this->reqs1->Name = L"reqs1";  

this->reqs1->Size = System::Drawing::Size(210, 20);  

this->reqs1->TabIndex = 15;  

this->reqs1-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

this->ttip->SetToolTip(this->reqs1, L"Your friend's School Name");  

//  

// requ1  

//  

this->requ1->BackColor = System::Drawing::Color::Transparent;  

this->requ1->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->requ1->Location = System::Drawing::Point(105, 6);  

this->requ1->Name = L"requ1";  

this->requ1->Size = System::Drawing::Size(210, 20);  

this->requ1->TabIndex = 14;  

this->requ1-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

this->ttip->SetToolTip(this->requ1, L"Your Friend's Full Name");  

//  

// reqi1  

//  

this->reqi1->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->reqi1->Location = System::Drawing::Point(4, 3);  

this->reqi1->Name = L"reqi1";  

this->reqi1->Size = System::Drawing::Size(100, 81);  

this->reqi1->TabIndex = 12;  

this->reqi1->TabStop = false;  

this->ttip->SetToolTip(this->reqi1, L"Your Friend's Profile  

Image");  

//  

// reqs4  

//  

this->reqs4->BackColor = System::Drawing::Color::Transparent;  

this->reqs4->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->reqs4->Location = System::Drawing::Point(105, 31);  

this->reqs4->Name = L"reqs4";  

this->reqs4->Size = System::Drawing::Size(210, 20);  

this->reqs4->TabIndex = 15;  

this->reqs4-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

this->ttip->SetToolTip(this->reqs4, L"Your friend's School Name");  

//  

// requ4  

//  

this->requ4->BackColor = System::Drawing::Color::Transparent;  

this->requ4->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,

```

```

        static_cast<System::Byte>(0));
this->requ4->Location = System::Drawing::Point(105, 6);
this->requ4->Name = L"requ4";
this->requ4->Size = System::Drawing::Size(210, 20);
this->requ4->TabIndex = 14;
this->requ4-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
this->ttip->SetToolTip(this->requ4, L"Your Friend\''s Full Name");
//
// requ4
//
this->reqi4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->reqi4->Location = System::Drawing::Point(4, 3);
this->reqi4->Name = L"reqi4";
this->reqi4->Size = System::Drawing::Size(100, 81);
this->reqi4->TabIndex = 12;
this->reqi4->TabStop = false;
this->ttip->SetToolTip(this->reqi4, L"Your Friend\''s Profile
Image");
//
// label18
//
this->label18->BackColor = System::Drawing::Color::Teal;
this->label18->Cursor = System::Windows::Forms::Cursors::Hand;
this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label18->ForeColor = System::Drawing::Color::Black;
this->label18->Location = System::Drawing::Point(137, 54);
this->label18->Name = L"label18";
this->label18->Size = System::Drawing::Size(72, 30);
this->label18->TabIndex = 11;
this->label18->Text = L"Accept";
this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
this->ttip->SetToolTip(this->label18, L"I know this person. Accept
this person as a friend of mine.");
this->label18->Click += gcnew System::EventHandler(this,
&baseF::pictureBox13_Click);
//
// label19
//
this->label19->BackColor = System::Drawing::Color::Maroon;
this->label19->Cursor = System::Windows::Forms::Cursors::Hand;
this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label19->ForeColor = System::Drawing::Color::White;
this->label19->Location = System::Drawing::Point(244, 54);
this->label19->Name = L"label19";
this->label19->Size = System::Drawing::Size(72, 30);
this->label19->TabIndex = 10;
this->label19->Text = L"Decline";
this->label19-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
this->ttip->SetToolTip(this->label19, L"I don\''t know this person.
Decline this person.");

```

```

        this->label19->Click += gcnew System::EventHandler(this,
&baseF::pictureBox12_Click);
        //
        // pictureBox12
        //
        this->pictureBox12->BackColor = System::Drawing::Color::Maroon;
        this->pictureBox12->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox12.BackgroundImage")));
        this->pictureBox12->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox12->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox12->Location = System::Drawing::Point(214, 54);
        this->pictureBox12->Name = L"pictureBox12";
        this->pictureBox12->Size = System::Drawing::Size(30, 30);
        this->pictureBox12->TabIndex = 7;
        this->pictureBox12->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox12, L"I don't know this
person. Decline this person.");
        this->pictureBox12->Click += gcnew System::EventHandler(this,
&baseF::pictureBox12_Click);
        //
        // pictureBox13
        //
        this->pictureBox13->BackColor = System::Drawing::Color::Teal;
        this->pictureBox13->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox13.BackgroundImage")));
        this->pictureBox13->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox13->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox13->Location = System::Drawing::Point(107, 54);
        this->pictureBox13->Name = L"pictureBox13";
        this->pictureBox13->Size = System::Drawing::Size(30, 30);
        this->pictureBox13->TabIndex = 6;
        this->pictureBox13->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox13, L"I know this person.
Accept this person as a friend of mine.");
        this->pictureBox13->Click += gcnew System::EventHandler(this,
&baseF::pictureBox13_Click);
        //
        // reqs5
        //
        this->reqs5->BackColor = System::Drawing::Color::Transparent;
        this->reqs5->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->reqs5->Location = System::Drawing::Point(105, 31);
        this->reqs5->Name = L"reqs5";
        this->reqs5->Size = System::Drawing::Size(210, 20);
        this->reqs5->TabIndex = 15;
        this->reqs5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->reqs5, L"Your friend's School Name");
        //
        // requ5
        //
        this->requ5->BackColor = System::Drawing::Color::Transparent;

```

```

        this->requ5->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->requ5->Location = System::Drawing::Point(105, 6);
        this->requ5->Name = L"requ5";
        this->requ5->Size = System::Drawing::Size(210, 20);
        this->requ5->TabIndex = 14;
        this->requ5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->requ5, L"Your Friend's Full Name");
//
// requ5
//
        this->reqi5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->reqi5->Location = System::Drawing::Point(4, 3);
        this->reqi5->Name = L"reqi5";
        this->reqi5->Size = System::Drawing::Size(100, 81);
        this->reqi5->TabIndex = 12;
        this->reqi5->TabStop = false;
        this->ttip->SetToolTip(this->reqi5, L"Your Friend's Profile
Image");
//
// label7
//
        this->label7->BackColor = System::Drawing::Color::Teal;
        this->label7->Cursor = System::Windows::Forms::Cursors::Hand;
        this->label7->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label7->ForeColor = System::Drawing::Color::Black;
        this->label7->Location = System::Drawing::Point(137, 54);
        this->label7->Name = L"label7";
        this->label7->Size = System::Drawing::Size(72, 30);
        this->label7->TabIndex = 11;
        this->label7->Text = L"Accept";
        this->label7-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->label7, L"I know this person. Accept
this person as a friend of mine.");
        this->label7->Click += gcnew System::EventHandler(this,
&baseF::pictureBox16_Click);
//
// label8
//
        this->label8->BackColor = System::Drawing::Color::Maroon;
        this->label8->Cursor = System::Windows::Forms::Cursors::Hand;
        this->label8->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label8->ForeColor = System::Drawing::Color::White;
        this->label8->Location = System::Drawing::Point(244, 54);
        this->label8->Name = L"label8";
        this->label8->Size = System::Drawing::Size(72, 30);
        this->label8->TabIndex = 10;
        this->label8->Text = L"Decline";
        this->label8-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;

```

```

        this->ttip->SetToolTip(this->label8, L"I don't know this person.
Decline this person.");
        this->label8->Click += gcnew System::EventHandler(this,
&baseF::pictureBox15_Click);
        //
// pictureBox15
//
        this->pictureBox15->BackColor = System::Drawing::Color::Maroon;
        this->pictureBox15->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox15.BackgroundImage")));
        this->pictureBox15->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox15->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox15->Location = System::Drawing::Point(214, 54);
        this->pictureBox15->Name = L"pictureBox15";
        this->pictureBox15->Size = System::Drawing::Size(30, 30);
        this->pictureBox15->TabIndex = 7;
        this->pictureBox15->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox15, L"I don't know this
person. Decline this person.");
        this->pictureBox15->Click += gcnew System::EventHandler(this,
&baseF::pictureBox15_Click);
        //
// pictureBox16
//
        this->pictureBox16->BackColor = System::Drawing::Color::Teal;
        this->pictureBox16->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox16.BackgroundImage")));
        this->pictureBox16->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox16->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox16->Location = System::Drawing::Point(107, 54);
        this->pictureBox16->Name = L"pictureBox16";
        this->pictureBox16->Size = System::Drawing::Size(30, 30);
        this->pictureBox16->TabIndex = 6;
        this->pictureBox16->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox16, L"I know this person.
Accept this person as a friend of mine.");
        this->pictureBox16->Click += gcnew System::EventHandler(this,
&baseF::pictureBox16_Click);
        //
// panel2
//
        this->panel2->BackColor = System::Drawing::Color::Transparent;
        this->panel2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel2.BackgroundImage")));
        this->panel2->Controls->Add(this->o10);
        this->panel2->Controls->Add(this->o9);
        this->panel2->Controls->Add(this->o8);
        this->panel2->Controls->Add(this->o7);
        this->panel2->Controls->Add(this->o6);
        this->panel2->Controls->Add(this->o5);
        this->panel2->Controls->Add(this->o4);
        this->panel2->Controls->Add(this->o3);
        this->panel2->Controls->Add(this->o2);

```

```

this->panel2->Controls->Add(this->o1);
this->panel2->Controls->Add(this->f7);
this->panel2->Controls->Add(this->f6);
this->panel2->Controls->Add(this->f8);
this->panel2->Controls->Add(this->f10);
this->panel2->Controls->Add(this->f9);
this->panel2->Controls->Add(this->f5);
this->panel2->Controls->Add(this->f4);
this->panel2->Controls->Add(this->f3);
this->panel2->Controls->Add(this->f2);
this->panel2->Controls->Add(this->f1);
this->panel2->Location = System::Drawing::Point(12, 63);
this->panel2->Name = L"panel2";
this->panel2->Size = System::Drawing::Size(667, 428);
this->panel2->TabIndex = 2;
//
// f7
//
this->f7->Controls->Add(this->n7);
this->f7->Controls->Add(this->p7);
this->f7->Controls->Add(this->r7);
this->f7->Location = System::Drawing::Point(344, 149);
this->f7->Name = L"f7";
this->f7->Size = System::Drawing::Size(128, 132);
this->f7->TabIndex = 9;
//
// f6
//
this->f6->Controls->Add(this->n6);
this->f6->Controls->Add(this->p6);
this->f6->Controls->Add(this->r6);
this->f6->Location = System::Drawing::Point(177, 149);
this->f6->Name = L"f6";
this->f6->Size = System::Drawing::Size(128, 132);
this->f6->TabIndex = 8;
//
// f8
//
this->f8->Controls->Add(this->p8);
this->f8->Controls->Add(this->n8);
this->f8->Controls->Add(this->r8);
this->f8->Location = System::Drawing::Point(511, 149);
this->f8->Name = L"f8";
this->f8->Size = System::Drawing::Size(128, 132);
this->f8->TabIndex = 7;
//
// f10
//
this->f10->Controls->Add(this->n10);
this->f10->Controls->Add(this->p10);
this->f10->Controls->Add(this->r10);
this->f10->Location = System::Drawing::Point(344, 287);
this->f10->Name = L"f10";
this->f10->Size = System::Drawing::Size(128, 132);
this->f10->TabIndex = 6;
//
// f9
//

```

```

this->f9->Controls->Add(this->n9);
this->f9->Controls->Add(this->p9);
this->f9->Controls->Add(this->r9);
this->f9->Location = System::Drawing::Point(177, 287);
this->f9->Name = L"f9";
this->f9->Size = System::Drawing::Size(128, 132);
this->f9->TabIndex = 5;
//
// f5
//
this->f5->Controls->Add(this->n5);
this->f5->Controls->Add(this->p5);
this->f5->Controls->Add(this->r5);
this->f5->Location = System::Drawing::Point(10, 149);
this->f5->Name = L"f5";
this->f5->Size = System::Drawing::Size(128, 132);
this->f5->TabIndex = 4;
//
// f4
//
this->f4->Controls->Add(this->n4);
this->f4->Controls->Add(this->p4);
this->f4->Controls->Add(this->r4);
this->f4->Location = System::Drawing::Point(511, 9);
this->f4->Name = L"f4";
this->f4->Size = System::Drawing::Size(128, 132);
this->f4->TabIndex = 3;
//
// f3
//
this->f3->Controls->Add(this->n3);
this->f3->Controls->Add(this->p3);
this->f3->Controls->Add(this->r3);
this->f3->Location = System::Drawing::Point(344, 9);
this->f3->Name = L"f3";
this->f3->Size = System::Drawing::Size(128, 132);
this->f3->TabIndex = 2;
//
// f2
//
this->f2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->f2->Controls->Add(this->n2);
this->f2->Controls->Add(this->p2);
this->f2->Controls->Add(this->r2);
this->f2->Cursor = System::Windows::Forms::Cursors::Arrow;
this->f2->Location = System::Drawing::Point(177, 9);
this->f2->Name = L"f2";
this->f2->Size = System::Drawing::Size(128, 132);
this->f2->TabIndex = 1;
//
// f1
//
this->f1->Controls->Add(this->n1);
this->f1->Controls->Add(this->p1);
this->f1->Controls->Add(this->r1);
this->f1->Location = System::Drawing::Point(10, 9);
this->f1->Name = L"f1";

```

```

this->f1->Size = System::Drawing::Size(128, 132);
this->f1->TabIndex = 0;
//
// reqPanel
//
this->reqPanel->AutoScroll = true;
this->reqPanel->AutoSize = true;
this->reqPanel->BackColor = System::Drawing::Color::White;
this->reqPanel->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"reqPanel.BackgroundImage")));
this->reqPanel->Controls->Add(this->req5);
this->reqPanel->Controls->Add(this->req4);
this->reqPanel->Controls->Add(this->reqNo);
this->reqPanel->Controls->Add(this->req3);
this->reqPanel->Controls->Add(this->req2);
this->reqPanel->Controls->Add(this->pictureBox1);
this->reqPanel->Controls->Add(this->label2);
this->reqPanel->Controls->Add(this->req1);
this->reqPanel->Dock = System::Windows::Forms::DockStyle::Left;
this->reqPanel->Location = System::Drawing::Point(0, 0);
this->reqPanel->Name = L"reqPanel";
this->reqPanel->Size = System::Drawing::Size(333, 503);
this->reqPanel->TabIndex = 21;
this->reqPanel->Visible = false;
//
// req5
//
this->req5->BackColor = System::Drawing::Color::Gold;
this->req5->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"req5.BackgroundImage")));
this->req5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->req5->Controls->Add(this->reqs5);
this->req5->Controls->Add(this->requ5);
this->req5->Controls->Add(this->reqi5);
this->req5->Controls->Add(this->label7);
this->req5->Controls->Add(this->label8);
this->req5->Controls->Add(this->pictureBox15);
this->req5->Controls->Add(this->pictureBox16);
this->req5->Cursor = System::Windows::Forms::Cursors::Arrow;
this->req5->Location = System::Drawing::Point(5, 410);
this->req5->Name = L"req5";
this->req5->Size = System::Drawing::Size(323, 89);
this->req5->TabIndex = 9;
this->req5->Visible = false;
//
// req4
//
this->req4->BackColor = System::Drawing::Color::Gold;
this->req4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"req4.BackgroundImage")));
this->req4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->req4->Controls->Add(this->reqs4);
this->req4->Controls->Add(this->requ4);

```

```

        this->req4->Controls->Add(this->reqi4);
        this->req4->Controls->Add(this->label18);
        this->req4->Controls->Add(this->label19);
        this->req4->Controls->Add(this->pictureBox12);
        this->req4->Controls->Add(this->pictureBox13);
        this->req4->Cursor = System::Windows::Forms::Cursors::Arrow;
        this->req4->Location = System::Drawing::Point(5, 318);
        this->req4->Name = L"req4";
        this->req4->Size = System::Drawing::Size(323, 89);
        this->req4->TabIndex = 8;
        this->req4->Visible = false;
    //
    // reqNo
    //
    this->reqNo->BackColor = System::Drawing::Color::DarkSlateGray;
    this->reqNo->Dock = System::Windows::Forms::DockStyle::Top;
    this->reqNo->ForeColor = System::Drawing::Color::White;
    this->reqNo->Location = System::Drawing::Point(0, 18);
    this->reqNo->Name = L"reqNo";
    this->reqNo->Size = System::Drawing::Size(333, 20);
    this->reqNo->TabIndex = 7;
    this->reqNo->Text = L"You 5 Friend Requests";
    this->reqNo-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
    //
    // req3
    //
    this->req3->BackColor = System::Drawing::Color::Gold;
    this->req3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"req3.BackgroundImage")));
    this->req3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->req3->Controls->Add(this->reqs3);
    this->req3->Controls->Add(this->requ3);
    this->req3->Controls->Add(this->reqi3);
    this->req3->Controls->Add(this->label13);
    this->req3->Controls->Add(this->label14);
    this->req3->Controls->Add(this->pictureBox9);
    this->req3->Controls->Add(this->pictureBox10);
    this->req3->Cursor = System::Windows::Forms::Cursors::Arrow;
    this->req3->Location = System::Drawing::Point(5, 226);
    this->req3->Name = L"req3";
    this->req3->Size = System::Drawing::Size(323, 89);
    this->req3->TabIndex = 6;
    this->req3->Visible = false;
    //
    // req2
    //
    this->req2->BackColor = System::Drawing::Color::Gold;
    this->req2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"req2.BackgroundImage")));
    this->req2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->req2->Controls->Add(this->reqs2);
    this->req2->Controls->Add(this->requ2);
    this->req2->Controls->Add(this->reqi2);

```

```

this->req2->Controls->Add(this->label9);
this->req2->Controls->Add(this->label10);
this->req2->Controls->Add(this->pictureBox4);
this->req2->Controls->Add(this->pictureBox5);
this->req2->Cursor = System::Windows::Forms::Cursors::Arrow;
this->req2->Location = System::Drawing::Point(5, 134);
this->req2->Name = L"req2";
this->req2->Size = System::Drawing::Size(323, 89);
this->req2->TabIndex = 5;
this->req2->Visible = false;
//
// label2
//
this->label2->BackColor = System::Drawing::Color::Transparent;
this->label2->Dock = System::Windows::Forms::DockStyle::Top;
this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label2->ForeColor = System::Drawing::Color::White;
this->label2->ImageAlign =
System::Drawing::ContentAlignment::TopCenter;
this->label2->Location = System::Drawing::Point(0, 0);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(333, 18);
this->label2->TabIndex = 4;
this->label2->Text = L"Friend Requests";
this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// req1
//
this->req1->BackColor = System::Drawing::Color::Gold;
this->req1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"req1.BackgroundImage")));
this->req1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->req1->Controls->Add(this->reqs1);
this->req1->Controls->Add(this->requ1);
this->req1->Controls->Add(this->reqi1);
this->req1->Controls->Add(this->label3);
this->req1->Controls->Add(this->label4);
this->req1->Controls->Add(this->pictureBox6);
this->req1->Controls->Add(this->pictureBox7);
this->req1->Cursor = System::Windows::Forms::Cursors::Arrow;
this->req1->Location = System::Drawing::Point(5, 42);
this->req1->Name = L"req1";
this->req1->Size = System::Drawing::Size(323, 89);
this->req1->TabIndex = 2;
this->req1->Visible = false;
//
// tim
//
this->tim->Interval = 1000;
this->tim->Tick += gcnew System::EventHandler(this,
&baseF::tim_Tick);
//
// baseF

```

```

//  

this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);  

this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;  

this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"$this.BackgroundImage")));  

this->ClientSize = System::Drawing::Size(691, 503);  

this->Controls->Add(this->reqPanel);  

this->Controls->Add(this->panel2);  

this->Controls->Add(this->panel1);  

this->ForeColor = System::Drawing::Color::Black;  

this->FormBorderStyle =  
System::Windows::Forms::FormBorderStyle::FixedSingle;  

this->MaximizeBox = false;  

this->MinimizeBox = false;  

this->Name = L"baseF";  

this->>ShowIcon = false;  

this->>ShowInTaskbar = false;  

this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;  

this->StartPosition =  
System::Windows::Forms::FormStartPosition::CenterScreen;  

this->Text = L"Basura\'s Friends";  

this->TopMost = true;  

this->panel1->ResumeLayout(false);  

this->panel1->PerformLayout();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->reqP))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r2))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p2))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p3))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r3))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p4))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r4))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r8))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p7))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r7))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p6))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r6))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p1))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r1))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p5))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->r5))->EndInit();  

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->p9))->EndInit();

```

```
>r9))->EndInit();
>p10))->EndInit();
>r10))->EndInit();
>o1))->EndInit();
>o2))->EndInit();
>o3))->EndInit();
>o4))->EndInit();
>o8))->EndInit();
>o7))->EndInit();
>o6))->EndInit();
>o5))->EndInit();
>o10))->EndInit();
>o9))->EndInit();
>p8))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox1))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox9))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox10))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox4))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox5))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox6))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox7))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>reqi3))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>reqi2))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>reqi1))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>reqi4))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox12))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox13))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>reqi5))->EndInit();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox15))->EndInit();
```

```

        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox16))->EndInit();
        this->panel2->ResumeLayout(false);
        this->f7->ResumeLayout(false);
        this->f6->ResumeLayout(false);
        this->f8->ResumeLayout(false);
        this->f10->ResumeLayout(false);
        this->f9->ResumeLayout(false);
        this->f5->ResumeLayout(false);
        this->f4->ResumeLayout(false);
        this->f3->ResumeLayout(false);
        this->f2->ResumeLayout(false);
        this->f1->ResumeLayout(false);
        this->reqPanel->ResumeLayout(false);
        this->req5->ResumeLayout(false);
        this->req4->ResumeLayout(false);
        this->req3->ResumeLayout(false);
        this->req2->ResumeLayout(false);
        this->req1->ResumeLayout(false);
        this->ResumeLayout(false);
        this->PerformLayout();

    }

#pragma endregion

private: System::Void search_Click(System::Object^ sender, System::EventArgs^ e)
{
    try{
        if(searchT->Text != ""){
            loadContent lc1;
            lc1.Show();
            setSearch(0,searchT->Text);

            System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("fMOLE.exe","mFriend.jar"))->WaitForExit();
            searchR s;
            s.ShowDialog();
        }else{
            MessageBox::Show("Enter a Username, You cannot
for search a user by entering nothing", "MOLE Advisor");
        }
    }catch(Exception^ e){
        MessageBox::Show("We Encountered a Problem. " + e-
>Message + Environment::.NewLine+"1. Check you Connection and Try
Again"+Environment::.NewLine+ "2. Try reinstalling the Application", "MOLE Advisor");
        this->Close();
    }
}

void setSearch(int a, String^ b){
    StreamWriter^ sw = gcnew StreamWriter(
Application::ExecutablePath->Replace("fMOLE.exe","user\\mFriend.ms"));
    sw->WriteLine("FUser = "+b);
    sw->WriteLine("AddU = "+a);
    sw->Close();
}

private: System::Void reqP_Click(System::Object^ sender, System::EventArgs^ e) {
    tim->Enabled=false;
    reqPanel->Visible=true;
}

```

```

        }
private: System::Void pictureBox1_Click(System::Object^  sender, System::EventArgs^  e) {
    reqPanel->Visible=false;
}
private: System::Void label3_Click(System::Object^  sender, System::EventArgs^  e) {
    addF(req1->Text);
    req1->Visible=false;
}
private: System::Void pictureBox5_Click(System::Object^  sender, System::EventArgs^  e) {
    addF(req2->Text);
    req2->Visible=false;
}
private: System::Void pictureBox10_Click(System::Object^  sender, System::EventArgs^  e)
{
    addF(req3->Text);
    req3->Visible=false;
}
private: System::Void pictureBox13_Click(System::Object^  sender, System::EventArgs^  e)
{
    addF(req4->Text);
    req4->Visible=false;
}
private: System::Void pictureBox16_Click(System::Object^  sender, System::EventArgs^  e)
{
    addF(req5->Text);
    req5->Visible=false;
}
private: System::Void pictureBox6_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(req1->Text);
    req1->Visible=false;
}
private: System::Void pictureBox4_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(req2->Text);
    req2->Visible=false;
}
private: System::Void pictureBox9_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(req3->Text);
    req3->Visible=false;
}
private: System::Void pictureBox12_Click(System::Object^  sender, System::EventArgs^  e)
{
    removeF(req4->Text);
    req4->Visible=false;
}
private: System::Void pictureBox15_Click(System::Object^  sender, System::EventArgs^  e)
{
    removeF(req5->Text);
    req5->Visible=false;
}
private: System::Void r3_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n3->Text);
}
private: System::Void r4_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n4->Text);
}
private: System::Void r8_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n8->Text);
}

```

```

private: System::Void r7_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n7->Text);
}
private: System::Void r10_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n10->Text);
}
private: System::Void r2_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n2->Text);
}
private: System::Void r1_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n1->Text);
}
private: System::Void r5_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n5->Text);
}
private: System::Void r6_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n6->Text);
}
private: System::Void r9_Click(System::Object^  sender, System::EventArgs^  e) {
    removeF(n9->Text);
}

private: System::Void tim_Tick(System::Object^  sender, System::EventArgs^  e) {
    if(x%2 == 0){
        reqP->BackColor=System::Drawing::Color::White;
    }else{
        reqP->BackColor=System::Drawing::Color::DarkSlateGray;
    }
    x++;
}
};

}

```

5. searchR.cpp

```
#include "searchR.h"
```

6. searchR.h

```
#pragma once
#include "loadContent.h"

namespace fMOLE {

    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;

    /// <summary>
    /// Summary for searchR
    /// </summary>
    public ref class searchR : public System::Windows::Forms::Form
    {
    public:

        void getData(){
            try{
                StreamReader^ sr = gcnew
                StreamReader(Application::ExecutablePath->Replace("fMOLE.exe","user\\mFriend.ms"));
                int exist = System::Convert::ToInt16(sr->ReadLine()-
                >Substring(9));
                if(exist == 0){
                    ResultS(noResult);
                    sr->Close();
                }else{
                    ResultS(yesResult);
                    String^ req= sr->ReadLine()->Substring(8);
                    String^ u= sr->ReadLine()->Substring(9);
                    String^ n= sr->ReadLine()->Substring(8);
                    String^ s= sr->ReadLine()->Substring(7);
                    String^ o= sr->ReadLine()->Substring(6);
                    sr->Close();
                    if(req == "NOT"){
                        con->Text="Add as a Friend";
                    }else if(req == "N"){
                        con->Text="Request Sent";
                        con->Enabled=false;
                    }else if(req == "Y"){
                        con->Text="Already Friends";
                        con->Enabled=false;
                    }
                    uname->Text=u;
                    fName->Text = n;
                    schName->Text = s;
                    if(o == "Y"){
                        status->BackColor=System::Drawing::Color::Green;
                    }
                }
            }
        }
    }
}
```

```

        }else{
            status-
>BackColor=System::Drawing::Color::Maroon;
        }
        pic-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe","user\\friends\\\"+u));
        }
    }catch(Exception^ e){
        if(e->Message->Contains("Out")){
            pic-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("fMOLE.exe","core\\female.mi"));
        }else{
            MessageBox::Show("We Encountered a Problem. " + e-
>Message + Environment::.NewLine+"1. Check you Connection and Try
Again"+Environment::.NewLine+"2. Try reinstalling the Application", "MOLE Advisor");
            this->Close();
        }
    }
}
searchR(void)
{
    InitializeComponent();
    loadContent lc2;
}
void ResultS(Panel^ p){
    p->Size=System::Drawing::Size(440, 121);
    p->Location=System::Drawing::Point(4,4);
    p->Visible=true;
}
protected:
/// <summary>
/// Clean up any resources being used.
/// </summary>
~searchR()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::PictureBox^ pictureBox1;
private: System::Windows::Forms::Panel^ noResult;
private: System::Windows::Forms::Label^ userL;

private: System::Windows::Forms::Label^ label2;
private: System::Windows::Forms::Panel^ panel2;
private: System::Windows::Forms::Label^ label1;
private: System::Windows::Forms::ToolTip^ ttip;
private: System::Windows::Forms::Panel^ yesResult;
private: System::Windows::Forms::Label^ schName;
private: System::Windows::Forms::Label^ fName;
private: System::Windows::Forms::Panel^ pic;

```

```

private: System::Windows::Forms::Button^  con;
private: System::Windows::Forms::Label^  uname;
private: System::Windows::Forms::PictureBox^  status;

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

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^  resources =
(gcnew System::ComponentModel::ComponentResourceManager(searchR::typeid));
        this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
        this->noResult = (gcnew System::Windows::Forms::Panel());
        this->userL = (gcnew System::Windows::Forms::Label());
        this->label2 = (gcnew System::Windows::Forms::Label());
        this->panel2 = (gcnew System::Windows::Forms::Panel());
        this->label1 = (gcnew System::Windows::Forms::Label());
        this->tTip = (gcnew System::Windows::Forms::ToolTip(this-
>components));
        this->con = (gcnew System::Windows::Forms::Button());
        this->status = (gcnew System::Windows::Forms::PictureBox());
        this->yesResult = (gcnew System::Windows::Forms::Panel());
        this->schName = (gcnew System::Windows::Forms::Label());
        this->fName = (gcnew System::Windows::Forms::Label());
        this->pic = (gcnew System::Windows::Forms::Panel());
        this->uname = (gcnew System::Windows::Forms::Label());
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox1))->BeginInit();
        this->noResult->SuspendLayout();
        this->panel2->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>status))->BeginInit();
        this->yesResult->SuspendLayout();
        this->pic->SuspendLayout();
        this->SuspendLayout();
        //
        // pictureBox
        //
        this->pictureBox1->BackColor = System::Drawing::Color::Transparent;

```

```

        this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
        this->pictureBox1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox1->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox1->Location = System::Drawing::Point(450, 4);
        this->pictureBox1->Name = L"pictureBox1";
        this->pictureBox1->Size = System::Drawing::Size(18, 16);
        this->pictureBox1->TabIndex = 0;
        this->pictureBox1->TabStop = false;
        this->ttip->SetToolTip(this->pictureBox1, L"Close this Window");
        this->pictureBox1->Click += gcnew System::EventHandler(this,
&searchR::pictureBox1_Click);
        //
        // noResult
        //
        this->noResult->BackColor = System::Drawing::Color::Transparent;
        this->noResult->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"noResult.BackgroundImage")));
        this->noResult->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->noResult->Controls->Add(this->userL);
        this->noResult->Controls->Add(this->label2);
        this->noResult->Controls->Add(this->panel2);
        this->noResult->Location = System::Drawing::Point(4, 73);
        this->noResult->Name = L"noResult";
        this->noResult->Size = System::Drawing::Size(112, 52);
        this->noResult->TabIndex = 1;
        this->noResult->Visible = false;
        //
        // userL
        //
        this->userL->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->userL->Location = System::Drawing::Point(121, 60);
        this->userL->Name = L"userL";
        this->userL->Size = System::Drawing::Size(314, 28);
        this->userL->TabIndex = 3;
        this->userL->Text = L"The Username you searched for is not
registered. \r\nPlease Enter a Registered User"
        L"name.";
        this->userL-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // label2
        //
        this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 20.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label2->Location = System::Drawing::Point(118, 29);
        this->label2->Name = L"label2";
        this->label2->Size = System::Drawing::Size(317, 32);
        this->label2->TabIndex = 2;
        this->label2->Text = L"No Such User Exists";

```

```

        this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// panel2
//
this->panel2->BackColor = System::Drawing::Color::Black;
this->panel2->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->panel2->Controls->Add(this->label1);
this->panel2->Location = System::Drawing::Point(2, 2);
this->panel2->Name = L"panel2";
this->panel2->Size = System::Drawing::Size(110, 114);
this->panel2->TabIndex = 0;
//
// label1
//
this->label1->AutoSize = true;
this->label1->BackColor = System::Drawing::Color::Transparent;
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 72,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label1->ForeColor = System::Drawing::Color::BlanchedAlmond;
this->label1->Location = System::Drawing::Point(4, 3);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(106, 111);
this->label1->TabIndex = 1;
this->label1->Text = L"\?";
//
// ttip
//
this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
this->ttip->ForeColor = System::Drawing::Color::White;
this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
this->ttip->ToolTipTitle = L"MOLE Advisor";
//
// con
//
this->con->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"con.BackgroundImage")));
this->con->Cursor = System::Windows::Forms::.Cursors::Hand;
this->con->FlatStyle = System::Windows::Forms::FlatStyle::PopUp;
this->con->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->con->ForeColor = System::Drawing::Color::Black;
this->con->Location = System::Drawing::Point(210, 88);
this->con->Name = L"con";
this->con->Size = System::Drawing::Size(148, 23);
this->con->TabIndex = 4;
this->con->Text = L"Add as a Friend";
this->ttip->SetToolTip(this->con, L"Click to Add Friend");
this->con->UseVisualStyleBackColor = true;
this->con->Click += gcnew System::EventHandler(this,
&searchR::con_Click);
//
// status
//
this->status->BackColor = System::Drawing::Color::Maroon;

```

```

        this->status->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->status->Location = System::Drawing::Point(113, 3);
        this->status->Name = L"status";
        this->status->Size = System::Drawing::Size(20, 20);
        this->status->TabIndex = 12;
        this->status->TabStop = false;
        this->ttip->SetToolTip(this->status, L"Green - Your Friend is
Online\r\nRed - Your Friend is Offline");
        //
        // yesResult
        //
        this->yesResult->BackColor = System::Drawing::Color::Transparent;
        this->yesResult->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"yesResult.BackgroundImage")));
        this->yesResult->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->yesResult->Controls->Add(this->status);
        this->yesResult->Controls->Add(this->con);
        this->yesResult->Controls->Add(this->schName);
        this->yesResult->Controls->Add(this->fName);
        this->yesResult->Controls->Add(this->pic);
        this->yesResult->Location = System::Drawing::Point(287, 51);
        this->yesResult->Name = L"yesResult";
        this->yesResult->Size = System::Drawing::Size(157, 74);
        this->yesResult->TabIndex = 2;
        this->yesResult->Visible = false;
        //
        // schName
        //
        this->schName->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->schName->Location = System::Drawing::Point(111, 52);
        this->schName->Name = L"schName";
        this->schName->Size = System::Drawing::Size(324, 28);
        this->schName->TabIndex = 3;
        this->schName->Text = L"JMC College International";
        this->schName-> TextAlign =
System::Drawing::ContentAlignment::TopCenter;
        //
        // fName
        //
        this->fName->Font = (gcnew System::Drawing::Font(L"Arial", 18,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->fName->Location = System::Drawing::Point(114, 21);
        this->fName->Name = L"fName";
        this->fName->Size = System::Drawing::Size(321, 32);
        this->fName->TabIndex = 2;
        this->fName->Text = L"Basura Ratnayake";
        this->fName-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // pic
        //
        this->pic->BackColor = System::Drawing::Color::Black;

```

```

        this->pic->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pic->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->pic->Controls->Add(this->uname);
        this->pic->Location = System::Drawing::Point(2, 2);
        this->pic->Name = L"pic";
        this->pic->Size = System::Drawing::Size(110, 114);
        this->pic->TabIndex = 0;
        //
        // uname
        //
        this->uname->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->uname->Dock = System::Windows::Forms::DockStyle::Bottom;
        this->uname->ForeColor = System::Drawing::Color::White;
        this->uname->Location = System::Drawing::Point(0, 94);
        this->uname->Name = L"uname";
        this->uname->Size = System::Drawing::Size(108, 18);
        this->uname->TabIndex = 5;
        this->uname->Text = L"adminReg";
        this->uname-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // searchR
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackColor = System::Drawing::Color::Black;
        this->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->ClientSize = System::Drawing::Size(472, 128);
        this->ControlBox = false;
        this->Controls->Add(this->yesResult);
        this->Controls->Add(this->noResult);
        this->Controls->Add(this->pictureBox1);
        this->ForeColor = System::Drawing::Color::Black;
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::None;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"searchR";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->TopMost = true;
        this->Load += gcnew System::EventHandler(this,
&searchR::searchR_Load);
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox1))->EndInit();
        this->noResult->ResumeLayout(false);
        this->panel2->ResumeLayout(false);
        this->panel2->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>status))->EndInit();
        this->yesResult->ResumeLayout(false);

```

```

        this->pic->ResumeLayout(false);
        this->ResumeLayout(false);

    }

#pragma endregion
    private: System::Void pictureBox1_Click(System::Object^ sender,
System::EventArgs^ e) {
        this->Close();
    }
private: System::Void con_Click(System::Object^ sender, System::EventArgs^ e) {
    try{
        StreamReader^ det = gcnew
StreamReader(Application::ExecutablePath->Replace("fMOLE.exe", "user\\log.ms"));
        String^ userNName=det->ReadLine()->Substring(11);
        if(userNName != uname->Text){
            StreamWriter^ sww = gcnew StreamWriter(
Application::ExecutablePath->Replace("fMOLE.exe", "user\\mFriend.ms"));
            sww->WriteLine("FUser = "+uname->Text);
            sww->WriteLine("AddU = 1");
            sww->Close();
            det->Close();
        }

        System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("fMOLE.exe", "mFriend.jar"))->WaitForExit();
        MessageBox::Show("A Friend Request is sent to "+fName-
>Text+". Ask your friend to confirm it.", "MOLE Advisor");
        Application::Restart();
    }else{
        MessageBox::Show("CRAZY!!, YOU CANNOT ADD YOURSELF AS A
FRIEND", "MOLE Advisor");
        det->Close();
    }
    this->Close();
}catch(Exception^ e){
    MessageBox::Show("We Encountered a Problem. " + e->Message +
Environment::NewLine+"1. Check your Connection and Try Again"+Environment::NewLine+ "2.
Try reinstalling the Application", "MOLE Advisor");
    this->Close();
}
}

private: System::Void searchR_Load(System::Object^ sender, System::EventArgs^ e) {
    getData();
}
};

}

```

7. resource.h

```
//{{NO_DEPENDENCIES}}
// Microsoft Visual C++ generated include file.
// Used by fMOLE.rc
//
#define IDI_ICON1           101
#define IDI_ICON2           102
#define IDI_ICON3           103

// Next default values for new objects
//
#ifndef APSTUDIO_INVOKED
#ifndef APSTUDIO_READONLY_SYMBOLS
#define _APS_NEXT_RESOURCE_VALUE    104
#define _APS_NEXT_COMMAND_VALUE     40001
#define _APS_NEXT_CONTROL_VALUE     1001
#define _APS_NEXT_SYMED_VALUE       101
#endif
#endif
```

8. MFriend.java

```
package mfriend;

import java.net.*;
import java.io.*;
import javax.swing.JOptionPane;

public class MFriend {

    public static void getImage(String a) {

        try {

            URL url2;
            URLConnection con2;
            DataInputStream dis2;
            FileOutputStream fos2;
            byte[] fileData;

            url2 = new URL("http://moles.loomhost.com/students/" + a);
            con2 = url2.openConnection();
            dis2 = new DataInputStream(con2.getInputStream());
            fileData = new byte[con2.getContentLength()];
            for (int x = 0; x < fileData.length; x++) {
                fileData[x] = dis2.readByte();
            }
            dis2.close();
            fos2 = new FileOutputStream(new File("user\\friends\\" + a));
            fos2.write(fileData);

        } catch (Exception e) {
            JOptionPane.showMessageDialog(null, "Error: " + e.getMessage());
        }
    }
}
```

```
fos2.close();

} catch (Exception e) {
}

}

public static String friend=null;

public static String user=null;

public static void main(String[] args) {

    String dataf[]={};

    try{

        BufferedReader useri = new BufferedReader(new FileReader("user\\log.ms"));

        user = useri.readLine().substring(11);

        useri.close();

        BufferedReader fri = new BufferedReader(new FileReader("user\\mFriend.ms"));

        friend = fri.readLine().substring(8);

        String uA = fri.readLine().substring(7);

        if("0".equals(uA) || "1".equals(uA)){

            if("0".equals(uA)){

                URL url = new

URL("http://mole.loomhost.com/Images_Settings/RegMe/friend?u="+user+"&f="+friend);

                URLConnection urlConnection = url.openConnection();

                HttpURLConnection connection = null;

                if(urlConnection instanceof HttpURLConnection){

                    connection = (HttpURLConnection) urlConnection;

                }

            }

        }

    }

}
```

```

        BufferedReader in = new BufferedReader(new
InputStreamReader(connection.getInputStream()));

        String data = null;
        String current = null;

        while((current = in.readLine()) != null){

            if(current.startsWith("FExist")){
                data += current;
            }
        }

        dataf=data.split("<br/>");

        PrintWriter details = new PrintWriter("user\\mFriend.ms", "UTF-8");

        details.println("FExist = "+dataf[0].substring(13));

        if(!"0".equals(dataf[0].substring(13))){


            details.println("FReqs = "+dataf[1].substring(8));
            details.println("FUName = "+dataf[2].substring(9));
            details.println("FName = "+dataf[3].substring(8));
            details.println("FSch = "+dataf[4].substring(7));
            details.println("FON = "+dataf[5].substring(6));
        }

        in.close();
        details.close();
        fri.close();

    }else{
        URL url1 = new
URL("http://mole.loomhost.com/Images_Settings/RegMe/friendAdd?u="+user+"&f="+friend);

        URLConnection urlConnection1 = url1.openConnection();

```

```

HttpURLConnection connection1 = null;

if(urlConnection1 instanceof HttpURLConnection){
    connection1 = (HttpURLConnection) urlConnection1;
}

BufferedReader in1 = new BufferedReader(new
InputStreamReader(connection1.getInputStream()));

in1.close();

}

fri.close();

URL url2;

URLConnection con2;

DataInputStream dis2;

FileOutputStream fos2;

byte[] fileData;

url2 = new URL("http://moles.loomhost.com/students/" + friend);

con2 = url2.openConnection();

dis2 = new DataInputStream(con2.getInputStream());

fileData = new byte[con2.getContentLength()];

for (int x = 0; x < fileData.length; x++) {

    fileData[x] = dis2.readByte();

}

dis2.close();

fos2 = new FileOutputStream(new File("user\\friends\\" + friend));

fos2.write(fileData);

fos2.close();

```

```

}else if("2".equals(uA)){

    URL url4 = new URL("http://mole.loomhost.com/Images_Settings/RegMe/displayF?u="+user);

    URLConnection urlConnection4 = url4.openConnection();

    HttpURLConnection connection4 = null;

    if (urlConnection4 instanceof HttpURLConnection) {

        connection4 = (HttpURLConnection) urlConnection4;

    }

    BufferedReader in4 = new BufferedReader(new
InputStreamReader(connection4.getInputStream()));

    String data4 = null;

    String current4 = null;

    while ((current4 = in4.readLine()) != null) {

        if (current4.startsWith("CF")) {

            data4 += current4;

        }

    }

    dataf = data4.split("<br/>");

    File f4=new File("user\\tFriends.ms");

    PrintWriter details4 = new PrintWriter("user\\tFriends.ms", "UTF-8");

    details4.println(dataf[0].substring(4));

    details4.println(dataf[1]);

    int count = new Integer(dataf[0].substring(9)) + new Integer(dataf[1].substring(6));

    int c1=2;

    while(count != 0){

        if(dataf[c1].contains("FUser")){
            getImage(dataf[c1].substring(8));
        }
    }
}

```

```

        details4.println(dataf[c1]);

        c1++;

        details4.println(dataf[c1]);

        c1++;

        details4.println(dataf[c1]);

    }

    count--;

    c1++;

}

details4.close();

in4.close();

fri.close();

}else if("3".equals(uA) || "4".equals(uA)){

    String funR = fri.readLine().substring(6);

    String msg=null;

    if("A".equals(funR)){

        msg =

"http://mole.loomhost.com/Images_Settings/RegMe/adReFriend?u="+user+"&f="+friend+"&fun=A";

    }else if("R".equals(funR)){

        msg =

"http://mole.loomhost.com/Images_Settings/RegMe/adReFriend?u="+user+"&f="+friend+"&fun=R";

    }

    URL urlA = new URL(msg);

    URLConnection urlConnection5 = urlA.openConnection();

    HttpURLConnection connection5 = null;

    if (urlConnection5 instanceof HttpURLConnection) {

```

```

connection5 = (HttpURLConnection) urlConnection5;
}

BufferedReader in5 = new BufferedReader(new
InputStreamReader(connection5.getInputStream()));

in5.close();
fri.close();

}else if ("5".equals(uA)){
    BufferedReader frienN = new BufferedReader(new FileReader("user\\tFriends.ms"));

    int count = new Integer(frienN.readLine().substring(5));

    String fn = frienN.readLine();

    PrintWriter dets = new PrintWriter("user\\tFriendsE.ms", "UTF-8");

    dets.println("TF = "+count);

    String Datas[];

    while(count != 0){

        fn = frienN.readLine();

        if(fn.startsWith("FUser")){
            fn = fn.substring(8);

            Datas=getData(fn).split("<br/>");

            dets.println("FUser = "+fn);

            dets.println("Pass = "+Datas[0].substring(9));

            dets.println("Fail = "+Datas[1].substring(5));

            count--;
        }
    }

    dets.close();
    frienN.close();
}

```

```

    }

}catch(Exception e){

    if(e.getMessage().contains(user)){

        JOptionPane.showMessageDialog(null, "We Encountered a Problem. "+e.getMessage());

    }

}

}

public static String getData(String a) {

    String data4 = null;

    try{

        URL url9 = new URL("http://mole.loomhost.com/Images_Settings/RegMe/examData?u=" + a);

        URLConnection urlConnection9 = url9.openConnection();

        HttpURLConnection connection9 = null;

        if (urlConnection9 instanceof HttpURLConnection) {

            connection9 = (HttpURLConnection) urlConnection9;

        }

        BufferedReader in9 = new BufferedReader(new

InputStreamReader(connection9.getInputStream()));

        String current4 = null;

        while ((current4 = in9.readLine()) != null) {

            if (current4.startsWith("TP")) {

                data4 += current4;

            }

        }

        in9.close();

    }

    return data4;
}

```

```
 }catch (Exception e){  
    JOptionPane.showMessageDialog(null, "We Encountered a Problem. "+e.getMessage());  
}  
  
return data4;  
  
}  
}
```

vii. My Friends' Progress (mfriendP)



1. resource.h

```
//{{NO_DEPENDENCIES}}
// Microsoft Visual C++ generated include file.
// Used by mfriendP.rc
//
#define IDI_ICON1           101

// Next default values for new objects
//
#ifndef APSTUDIO_INVOKED
#ifndef APSTUDIO_READONLY_SYMBOLS
#define _APS_NEXT_RESOURCE_VALUE    102
#define _APS_NEXT_COMMAND_VALUE     40001
#define _APS_NEXT_CONTROL_VALUE     1001
#define _APS_NEXT_SYMED_VALUE       101
#endif
#endif
```

2. baseF.cpp

```
#include "baseF.h"

using namespace mfriendP; //the project name in your header file

[STAThreadAttribute]
int main(array<System::String ^> ^args)
{
    Application::EnableVisualStyles();
    Application::SetCompatibleTextRenderingDefault(false);

    Application::Run(gcnew baseF());
    return 0;
}
```

3. baseF.h

```
#pragma once

namespace mfriendP {

    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;

    /// <summary>
    /// Summary for baseF
    /// </summary>
    public ref class baseF : public System::Windows::Forms::Form
    {
    public:
        array< Panel^ >^ pSet;
        array< PictureBox^ >^ picSet;
        array< ProgressBar^ >^ proSet;
        array< LinkLabel^ >^ unaSet;
        array< Label^ >^ exaSet;
        int tf;
        void setPanels(){
            try{
                //Panels
                pSet= gcnew array< Panel^ >(10);
                pSet[0]=f1;pSet[1]=f2;pSet[2]=f3;pSet[3]=f4;
                pSet[4]=f5;pSet[5]=f6;pSet[6]=f7;pSet[7]=f8;
                pSet[8]=f9;pSet[9]=f10;

                //Pictures
                picSet = gcnew array< PictureBox^ >(10);
                picSet[0]=p1;picSet[1]=p2;picSet[2]=p3;picSet[3]=p4;
                picSet[4]=p5;picSet[5]=p6;picSet[6]=p7;picSet[7]=p8;
                picSet[8]=p9;picSet[9]=p10;
            }
        }
    };
}
```

```

//Progress
proSet = gcnew array< ProgressBar^ >(10);
proSet[0]=pr1;proSet[1]=pr2;proSet[2]=pr3;proSet[3]=pr4;
proSet[4]=pr5;proSet[5]=pr6;proSet[6]=pr7;proSet[7]=pr8;
proSet[8]=pr9;proSet[9]=pr10;

//Labels
unaSet = gcnew array< LinkLabel^ >(10);
unaSet[0]=n1;unaSet[1]=n2;unaSet[2]=n3;unaSet[3]=n4;
unaSet[4]=n5;unaSet[5]=n6;unaSet[6]=n7;unaSet[7]=n8;
unaSet[8]=n9;unaSet[9]=n10;

//Labels
exaSet = gcnew array< Label^ >(10);
exaSet[0]=er1;exaSet[1]=er2;exaSet[2]=er3;exaSet[3]=er4;
exaSet[4]=er5;exaSet[5]=er6;exaSet[6]=er7;exaSet[7]=er8;
exaSet[8]=er9;exaSet[9]=er10;

StreamReader^ sr = gcnew
StreamReader(Application::ExecutablePath->Replace("mfriendP.exe", "user\\tFriendsE.ms"));
tf= System::Convert::ToInt16(sr->ReadLine()->Substring(5));
String^ un;
int p,f;
int pro;
while(tf != 0){
    un = sr->ReadLine();
    if(un->StartsWith("FUser")){
        unaSet[tf-1]->Text=un->Substring(8);
        p = System::Convert::ToInt16(sr->ReadLine()-
>Substring(7));
        f = System::Convert::ToInt16(sr->ReadLine()-
>Substring(7));
        if(p == 0){
            pro = 0;
        }else{
            pro = (p*100)/42;
        }
        try{
            picSet[tf-1]-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("mfriendP.exe", "user\\friends\\"+un->Substring(8)));
        }catch(Exception^ e){
            picSet[tf-1]-
>BackgroundImage=System::Drawing::Image::FromFile(Application::ExecutablePath-
>Replace("mfriendP.exe", "core\\female.mi"));
        }
        exaSet[tf-1]->Text="Passed = "+p+
Failed = "+f;
        proSet[tf-1]->Value=pro;
        this->tTip->SetToolTip(this->proSet[tf-1],
pro+"% Completed");
    }
    pSet[tf-1]->Visible=true;
    tf--;
}
sr->Close();
}catch(Exception^ e){

```

```

        MessageBox::Show("We Encountered a Problem. " + e->Message +
Environment::NewLine+"1. Check you Connection and Try Again"+Environment::NewLine+ "2.
Try reinstalling the Application", "MOLE Advisor");
        this->Close();
    }
}
baseF(void)  {
    InitializeComponent();
    setPanels();
}

protected:
/// <summary>
/// Clean up any resources being used.
/// </summary>
~baseF()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::Panel^ panel1;
protected:
private: System::Windows::Forms::Label^ label1;
private: System::Windows::Forms::Label^ name;
private: System::Windows::Forms::Panel^ f6;
private: System::Windows::Forms::ProgressBar^ pr6;

private: System::Windows::Forms::Label^ er6;

private: System::Windows::Forms::Label^ label15;
private: System::Windows::Forms::Label^ label16;
private: System::Windows::Forms::LinkLabel^ n6;

private: System::Windows::Forms::PictureBox^ p6;

private: System::Windows::Forms::Panel^ f5;
private: System::Windows::Forms::ProgressBar^ pr5;

private: System::Windows::Forms::Label^ er5;

private: System::Windows::Forms::Label^ label18;
private: System::Windows::Forms::Label^ label19;
private: System::Windows::Forms::LinkLabel^ n5;

private: System::Windows::Forms::PictureBox^ p5;

private: System::Windows::Forms::Panel^ f8;
private: System::Windows::Forms::ProgressBar^ pr8;

private: System::Windows::Forms::Label^ er8;

private: System::Windows::Forms::Label^ label27;
private: System::Windows::Forms::Label^ label28;

```

```
private: System::Windows::Forms::LinkLabel^  n8;
private: System::Windows::Forms::PictureBox^  p8;
private: System::Windows::Forms::Panel^  f7;
private: System::Windows::Forms::ProgressBar^  pr7;

private: System::Windows::Forms::Label^  er7;
private: System::Windows::Forms::Label^  label30;
private: System::Windows::Forms::Label^  label31;
private: System::Windows::Forms::LinkLabel^  n7;

private: System::Windows::Forms::PictureBox^  p7;
private: System::Windows::Forms::Panel^  f4;
private: System::Windows::Forms::ProgressBar^  pr4;

private: System::Windows::Forms::Label^  er4;
private: System::Windows::Forms::Label^  label3;
private: System::Windows::Forms::Label^  label4;
private: System::Windows::Forms::LinkLabel^  n4;

private: System::Windows::Forms::PictureBox^  p4;
private: System::Windows::Forms::Panel^  f3;
private: System::Windows::Forms::ProgressBar^  pr3;

private: System::Windows::Forms::Label^  er3;
private: System::Windows::Forms::Label^  label6;
private: System::Windows::Forms::Label^  label7;
private: System::Windows::Forms::LinkLabel^  n3;

private: System::Windows::Forms::PictureBox^  p3;
private: System::Windows::Forms::Panel^  f2;
private: System::Windows::Forms::ProgressBar^  pr2;

private: System::Windows::Forms::Label^  er2;
private: System::Windows::Forms::Label^  label9;
private: System::Windows::Forms::Label^  label10;
private: System::Windows::Forms::LinkLabel^  n2;

private: System::Windows::Forms::PictureBox^  p2;
private: System::Windows::Forms::Panel^  f1;
private: System::Windows::Forms::ProgressBar^  pr1;

private: System::Windows::Forms::Label^  er1;
```

```

private: System::Windows::Forms::Label^  label12;
private: System::Windows::Forms::Label^  label13;
private: System::Windows::Forms::LinkLabel^  n1;

private: System::Windows::Forms::PictureBox^  p1;

private: System::Windows::Forms::Panel^  f10;
private: System::Windows::Forms::ProgressBar^  pr10;

private: System::Windows::Forms::Label^  er10;

private: System::Windows::Forms::Label^  label21;
private: System::Windows::Forms::Label^  label22;
private: System::Windows::Forms::LinkLabel^  n10;

private: System::Windows::Forms::PictureBox^  p10;

private: System::Windows::Forms::Panel^  f9;
private: System::Windows::Forms::ProgressBar^  pr9;

private: System::Windows::Forms::Label^  er9;

private: System::Windows::Forms::Label^  label24;
private: System::Windows::Forms::Label^  label25;
private: System::Windows::Forms::LinkLabel^  n9;

private: System::Windows::Forms::PictureBox^  p9;
private: System::Windows::Forms::ToolTip^  ttip;
private: System::ComponentModel::.IContainer^  components;

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^  resources =
(gcnew System::ComponentModel::ComponentResourceManager(baseF::typeid));

```



```

this->p1 = (gcnew System::Windows::Forms::PictureBox());
this->f10 = (gcnew System::Windows::Forms::Panel());
this->pr10 = (gcnew System::Windows::Forms::ProgressBar());
this->er10 = (gcnew System::Windows::Forms::Label());
this->label21 = (gcnew System::Windows::Forms::Label());
this->label22 = (gcnew System::Windows::Forms::Label());
this->n10 = (gcnew System::Windows::Forms::LinkLabel());
this->p10 = (gcnew System::Windows::Forms::PictureBox());
this->f9 = (gcnew System::Windows::Forms::Panel());
this->pr9 = (gcnew System::Windows::Forms::ProgressBar());
this->er9 = (gcnew System::Windows::Forms::Label());
this->label24 = (gcnew System::Windows::Forms::Label());
this->label25 = (gcnew System::Windows::Forms::Label());
this->n9 = (gcnew System::Windows::Forms::LinkLabel());
this->p9 = (gcnew System::Windows::Forms::PictureBox());
this->ttip = (gcnew System::Windows::Forms::ToolTip(this-
>components));

this->panel1->SuspendLayout();
this->f6->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p6))->BeginInit();

this->f5->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p5))->BeginInit();

this->f8->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p8))->BeginInit();

this->f7->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p7))->BeginInit();

this->f4->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p4))->BeginInit();

this->f3->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p3))->BeginInit();

this->f2->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p2))->BeginInit();

this->f1->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p1))->BeginInit();

this->f10->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p10))->BeginInit();

this->f9->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>p9))->BeginInit();

this->SuspendLayout();
//
// panel1
//
this->panel1->BackColor = System::Drawing::Color::Transparent;
this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
this->panel1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;

```

```

this->panel1->Controls->Add(this->label1);
this->panel1->Controls->Add(this->name);
this->panel1->Location = System::Drawing::Point(0, -1);
this->panel1->Name = L"panel1";
this->panel1->Size = System::Drawing::Size(699, 58);
this->panel1->TabIndex = 2;
//
// label1
//
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label1->ForeColor = System::Drawing::Color::Black;
this->label1->Location = System::Drawing::Point(389, 36);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(53, 17);
this->label1->TabIndex = 6;
this->label1->Text = L"Progress";
this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
//
// name
//
this->name->Font = (gcnew System::Drawing::Font(L"Arial", 21.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->name->ForeColor = System::Drawing::Color::Black;
this->name->Location = System::Drawing::Point(3, 7);
this->name->Name = L"name";
this->name->Size = System::Drawing::Size(693, 31);
this->name->TabIndex = 1;
this->name->Text = L"Your Friend's";
this->name-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// f6
//
this->f6->BackColor = System::Drawing::Color::Transparent;
this->f6->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f6.BackgroundImage")));
this->f6->Controls->Add(this->pr6);
this->f6->Controls->Add(this->er6);
this->f6->Controls->Add(this->label15);
this->f6->Controls->Add(this->label16);
this->f6->Controls->Add(this->n6);
this->f6->Controls->Add(this->p6);
this->f6->Location = System::Drawing::Point(350, 234);
this->f6->Name = L"f6";
this->f6->Size = System::Drawing::Size(338, 75);
this->f6->TabIndex = 8;
this->f6->Visible = false;
//
// pr6
//
this->pr6->BackColor = System::Drawing::Color::Black;
this->pr6->ForeColor = System::Drawing::Color::Maroon;
this->pr6->Location = System::Drawing::Point(168, 31);
this->pr6->Name = L"pr6";

```

```

        this->pr6->RightToLeft = System::Windows::Forms::RightToLeft::No;
        this->pr6->Size = System::Drawing::Size(139, 20);
        this->pr6->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
        this->pr6->TabIndex = 6;
        this->pr6->Value = 80;
//
// er6
//
this->er6->BackColor = System::Drawing::Color::DodgerBlue;
this->er6->Dock = System::Windows::Forms::DockStyle::Bottom;
this->er6->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->er6->ForeColor = System::Drawing::Color::Black;
this->er6->Location = System::Drawing::Point(51, 60);
this->er6->Name = L"er6";
this->er6->Size = System::Drawing::Size(287, 15);
this->er6->TabIndex = 10;
this->er6->Text = L"Passed = 42           Failed = 0";
this->er6-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
this->ttip->SetToolTip(this->er6, L"Passed and Failed Examination
Count");
//
// label15
//
this->label15->AutoSize = true;
this->label15->BackColor = System::Drawing::Color::Transparent;
this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label15->ForeColor = System::Drawing::Color::Black;
this->label15->Location = System::Drawing::Point(308, 29);
this->label15->Name = L"label15";
this->label15->Size = System::Drawing::Size(27, 24);
this->label15->TabIndex = 9;
this->label15->Text = L"%";
//
// label16
//
this->label16->BackColor = System::Drawing::Color::Transparent;
this->label16->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label16->ForeColor = System::Drawing::Color::Black;
this->label16->Location = System::Drawing::Point(55, 31);
this->label16->Name = L"label16";
this->label16->Size = System::Drawing::Size(174, 22);
this->label16->TabIndex = 7;
this->label16->Text = L"Examination Progress";
this->label16-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// n6
//
this->n6->BackColor = System::Drawing::Color::Black;
this->n6->Dock = System::Windows::Forms::DockStyle::Top;

```

```

    this->n6->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
    this->n6->LinkColor = System::Drawing::Color::White;
    this->n6->Location = System::Drawing::Point(51, 0);
    this->n6->Name = L"n6";
    this->n6->Size = System::Drawing::Size(287, 23);
    this->n6->TabIndex = 5;
    this->n6->TabStop = true;
    this->n6->Text = L"Basura Ratnayake";
    this->n6->TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
    this->ttip->SetToolTip(this->n6, L"Your Friend\`s Username");
    //
// p6
//
    this->p6->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p6.BackgroundImage")));
    this->p6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->p6->Dock = System::Windows::Forms::DockStyle::Left;
    this->p6->Location = System::Drawing::Point(0, 0);
    this->p6->Name = L"p6";
    this->p6->Size = System::Drawing::Size(51, 75);
    this->p6->TabIndex = 4;
    this->p6->TabStop = false;
    this->ttip->SetToolTip(this->p6, L"Your Friend\`s Profile Image");
    //
// f5
//
    this->f5->BackColor = System::Drawing::Color::Transparent;
    this->f5->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f5.BackgroundImage")));
    this->f5->Controls->Add(this->pr5);
    this->f5->Controls->Add(this->er5);
    this->f5->Controls->Add(this->label18);
    this->f5->Controls->Add(this->label19);
    this->f5->Controls->Add(this->n5);
    this->f5->Controls->Add(this->p5);
    this->f5->Location = System::Drawing::Point(6, 234);
    this->f5->Name = L"f5";
    this->f5->Size = System::Drawing::Size(338, 75);
    this->f5->TabIndex = 7;
    this->f5->Visible = false;
    //
// pr5
//
    this->pr5->BackColor = System::Drawing::Color::Black;
    this->pr5->ForeColor = System::Drawing::Color::Maroon;
    this->pr5->Location = System::Drawing::Point(168, 31);
    this->pr5->Name = L"pr5";
    this->pr5->RightToLeft = System::Windows::Forms::RightToLeft::No;
    this->pr5->Size = System::Drawing::Size(139, 20);
    this->pr5->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
    this->pr5->TabIndex = 6;
    this->pr5->Value = 80;
    //
// er5
//

```

```

        this->er5->BackColor = System::Drawing::Color::DodgerBlue;
        this->er5->Dock = System::Windows::Forms::DockStyle::Bottom;
        this->er5->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->er5->ForeColor = System::Drawing::Color::Black;
        this->er5->Location = System::Drawing::Point(51, 60);
        this->er5->Name = L"er5";
        this->er5->Size = System::Drawing::Size(287, 15);
        this->er5->TabIndex = 10;
        this->er5->Text = L"Passed = 42           Failed = 0";
        this->er5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->er5, L"Passed and Failed Examination
Count");
    //
    // label18
    //
    this->label18->AutoSize = true;
    this->label18->BackColor = System::Drawing::Color::Transparent;
    this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->label18->ForeColor = System::Drawing::Color::Black;
    this->label18->Location = System::Drawing::Point(308, 29);
    this->label18->Name = L"label18";
    this->label18->Size = System::Drawing::Size(27, 24);
    this->label18->TabIndex = 9;
    this->label18->Text = L"%";
    //
    // label19
    //
    this->label19->BackColor = System::Drawing::Color::Transparent;
    this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->label19->ForeColor = System::Drawing::Color::Black;
    this->label19->Location = System::Drawing::Point(55, 31);
    this->label19->Name = L"label19";
    this->label19->Size = System::Drawing::Size(174, 22);
    this->label19->TabIndex = 7;
    this->label19->Text = L"Examination Progress";
    this->label19-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // n5
    //
    this->n5->BackColor = System::Drawing::Color::Black;
    this->n5->Dock = System::Windows::Forms::DockStyle::Top;
    this->n5->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
    this->n5->LinkColor = System::Drawing::Color::White;
    this->n5->Location = System::Drawing::Point(51, 0);
    this->n5->Name = L"n5";
    this->n5->Size = System::Drawing::Size(287, 23);
    this->n5->TabIndex = 5;
    this->n5->TabStop = true;
    this->n5->Text = L"Basura Ratnayake";

```

```

        this->n5->TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->n5, L"Your Friend\`s Username");
    //
    // p5
    //
    this->p5->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p5.BackgroundImage")));
    this->p5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->p5->Dock = System::Windows::Forms::DockStyle::Left;
    this->p5->Location = System::Drawing::Point(0, 0);
    this->p5->Name = L"p5";
    this->p5->Size = System::Drawing::Size(51, 75);
    this->p5->TabIndex = 4;
    this->p5->TabStop = false;
    this->ttip->SetToolTip(this->p5, L"Your Friend\`s Profile Image");
//
// f8
//
this->f8->BackColor = System::Drawing::Color::Transparent;
this->f8->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f8.BackgroundImage")));
    this->f8->Controls->Add(this->pr8);
    this->f8->Controls->Add(this->er8);
    this->f8->Controls->Add(this->label27);
    this->f8->Controls->Add(this->label28);
    this->f8->Controls->Add(this->n8);
    this->f8->Controls->Add(this->p8);
    this->f8->Location = System::Drawing::Point(350, 315);
    this->f8->Name = L"f8";
    this->f8->Size = System::Drawing::Size(338, 75);
    this->f8->TabIndex = 10;
    this->f8->Visible = false;
//
// pr8
//
this->pr8->BackColor = System::Drawing::Color::Black;
this->pr8->ForeColor = System::Drawing::Color::Maroon;
this->pr8->Location = System::Drawing::Point(168, 31);
this->pr8->Name = L"pr8";
this->pr8->RightToLeft = System::Windows::Forms::RightToLeft::No;
this->pr8->Size = System::Drawing::Size(139, 20);
this->pr8->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
    this->pr8->TabIndex = 6;
    this->pr8->Value = 80;
//
// er8
//
this->er8->BackColor = System::Drawing::Color::DodgerBlue;
this->er8->Dock = System::Windows::Forms::DockStyle::Bottom;
this->er8->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->er8->ForeColor = System::Drawing::Color::Black;
    this->er8->Location = System::Drawing::Point(51, 60);
    this->er8->Name = L"er8";
    this->er8->Size = System::Drawing::Size(287, 15);

```

```

        this->er8->TabIndex = 10;
        this->er8->Text = L"Passed = 42           Failed = 0";
        this->er8->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->er8, L"Passed and Failed Examination
Count");
        //
        // label27
        //
        this->label27->AutoSize = true;
        this->label27->BackColor = System::Drawing::Color::Transparent;
        this->label27->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label27->ForeColor = System::Drawing::Color::Black;
        this->label27->Location = System::Drawing::Point(308, 29);
        this->label27->Name = L"label27";
        this->label27->Size = System::Drawing::Size(27, 24);
        this->label27->TabIndex = 9;
        this->label27->Text = L"%";
        //
        // label28
        //
        this->label28->BackColor = System::Drawing::Color::Transparent;
        this->label28->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label28->ForeColor = System::Drawing::Color::Black;
        this->label28->Location = System::Drawing::Point(55, 31);
        this->label28->Name = L"label28";
        this->label28->Size = System::Drawing::Size(174, 22);
        this->label28->TabIndex = 7;
        this->label28->Text = L"Examination Progress";
        this->label28-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // n8
        //
        this->n8->BackColor = System::Drawing::Color::Black;
        this->n8->Dock = System::Windows::Forms::DockStyle::Top;
        this->n8->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
        this->n8->LinkColor = System::Drawing::Color::White;
        this->n8->Location = System::Drawing::Point(51, 0);
        this->n8->Name = L"n8";
        this->n8->Size = System::Drawing::Size(287, 23);
        this->n8->TabIndex = 5;
        this->n8->TabStop = true;
        this->n8->Text = L"Basura Ratnayake";
        this->n8-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->n8, L"Your Friend\`s Username");
        //
        // p8
        //
        this->p8->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p8.BackgroundImage")));
        this->p8->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;

```

```

this->p8->Dock = System::Windows::Forms::DockStyle::Left;
this->p8->Location = System::Drawing::Point(0, 0);
this->p8->Name = L"p8";
this->p8->Size = System::Drawing::Size(51, 75);
this->p8->TabIndex = 4;
this->p8->TabStop = false;
this->ttip->SetToolTip(this->p8, L"Your Friend\`s Profile Image");
//
// f7
//
this->f7->BackColor = System::Drawing::Color::Transparent;
this->f7->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f7.BackgroundImage")));
this->f7->Controls->Add(this->pr7);
this->f7->Controls->Add(this->er7);
this->f7->Controls->Add(this->label30);
this->f7->Controls->Add(this->label31);
this->f7->Controls->Add(this->n7);
this->f7->Controls->Add(this->p7);
this->f7->Location = System::Drawing::Point(6, 315);
this->f7->Name = L"f7";
this->f7->Size = System::Drawing::Size(338, 75);
this->f7->TabIndex = 9;
this->f7->Visible = false;
//
// pr7
//
this->pr7->BackColor = System::Drawing::Color::Black;
this->pr7->ForeColor = System::Drawing::Color::Maroon;
this->pr7->Location = System::Drawing::Point(168, 31);
this->pr7->Name = L"pr7";
this->pr7->RightToLeft = System::Windows::Forms::RightToLeft::No;
this->pr7->Size = System::Drawing::Size(139, 20);
this->pr7->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
this->pr7->TabIndex = 6;
this->pr7->Value = 80;
//
// er7
//
this->er7->BackColor = System::Drawing::Color::DodgerBlue;
this->er7->Dock = System::Windows::Forms::DockStyle::Bottom;
this->er7->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->er7->ForeColor = System::Drawing::Color::Black;
this->er7->Location = System::Drawing::Point(51, 60);
this->er7->Name = L"er7";
this->er7->Size = System::Drawing::Size(287, 15);
this->er7->TabIndex = 10;
this->er7->Text = L"Passed = 42           Failed = 0";
this->er7-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
this->ttip->SetToolTip(this->er7, L"Passed and Failed Examination
Count");
//
// label30
//

```

```

        this->label30->AutoSize = true;
        this->label30->BackColor = System::Drawing::Color::Transparent;
        this->label30->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label30->ForeColor = System::Drawing::Color::Black;
        this->label30->Location = System::Drawing::Point(308, 29);
        this->label30->Name = L"label30";
        this->label30->Size = System::Drawing::Size(27, 24);
        this->label30->TabIndex = 9;
        this->label30->Text = L"%";
        //
        // label31
        //
        this->label31->BackColor = System::Drawing::Color::Transparent;
        this->label31->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label31->ForeColor = System::Drawing::Color::Black;
        this->label31->Location = System::Drawing::Point(55, 31);
        this->label31->Name = L"label31";
        this->label31->Size = System::Drawing::Size(174, 22);
        this->label31->TabIndex = 7;
        this->label31->Text = L"Examination Progress";
        this->label31-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // n7
        //
        this->n7->BackColor = System::Drawing::Color::Black;
        this->n7->Dock = System::Windows::Forms::DockStyle::Top;
        this->n7->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
        this->n7->LinkColor = System::Drawing::Color::White;
        this->n7->Location = System::Drawing::Point(51, 0);
        this->n7->Name = L"n7";
        this->n7->Size = System::Drawing::Size(287, 23);
        this->n7->TabIndex = 5;
        this->n7->TabStop = true;
        this->n7->Text = L"Basura Ratnayake";
        this->n7-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->n7, L"Your Friend\`s Username");
        //
        // p7
        //
        this->p7->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p7.BackgroundImage")));
        this->p7->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p7->Dock = System::Windows::Forms::DockStyle::Left;
        this->p7->Location = System::Drawing::Point(0, 0);
        this->p7->Name = L"p7";
        this->p7->Size = System::Drawing::Size(51, 75);
        this->p7->TabIndex = 4;
        this->p7->TabStop = false;
        this->ttip->SetToolTip(this->p7, L"Your Friend\`s Profile Image");
        //
        // f4

```

```

//  

this->f4->BackColor = System::Drawing::Color::Transparent;  

this->f4->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"f4.BackgroundImage")));  

this->f4->Controls->Add(this->pr4);  

this->f4->Controls->Add(this->er4);  

this->f4->Controls->Add(this->label3);  

this->f4->Controls->Add(this->label4);  

this->f4->Controls->Add(this->n4);  

this->f4->Controls->Add(this->p4);  

this->f4->Location = System::Drawing::Point(350, 154);  

this->f4->Name = L"f4";  

this->f4->Size = System::Drawing::Size(338, 75);  

this->f4->TabIndex = 14;  

this->f4->Visible = false;  

//  

// pr4  

//  

this->pr4->BackColor = System::Drawing::Color::Black;  

this->pr4->ForeColor = System::Drawing::Color::Maroon;  

this->pr4->Location = System::Drawing::Point(168, 31);  

this->pr4->Name = L"pr4";  

this->pr4->RightToLeft = System::Windows::Forms::RightToLeft::No;  

this->pr4->Size = System::Drawing::Size(139, 20);  

this->pr4->Style =  

System::Windows::Forms::ProgressBarStyle::Continuous;  

this->pr4->TabIndex = 6;  

this->pr4->Value = 80;  

//  

// er4  

//  

this->er4->BackColor = System::Drawing::Color::DodgerBlue;  

this->er4->Dock = System::Windows::Forms::DockStyle::Bottom;  

this->er4->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,  

System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));  

this->er4->ForeColor = System::Drawing::Color::Black;  

this->er4->Location = System::Drawing::Point(51, 60);  

this->er4->Name = L"er4";  

this->er4->Size = System::Drawing::Size(287, 15);  

this->er4->TabIndex = 10;  

this->er4->Text = L"Passed = 42           Failed = 0";  

this->er4-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

this->ttip->SetToolTip(this->er4, L"Passed and Failed Examination  

Count");  

//  

// label3  

//  

this->label3->AutoSize = true;  

this->label3->BackColor = System::Drawing::Color::Transparent;  

this->label3->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));  

this->label3->ForeColor = System::Drawing::Color::Black;  

this->label3->Location = System::Drawing::Point(308, 29);  

this->label3->Name = L"label3";  

this->label3->Size = System::Drawing::Size(27, 24);

```

```

    this->label3->TabIndex = 9;
    this->label3->Text = L"%";
    //
    // label4
    //
    this->label4->BackColor = System::Drawing::Color::Transparent;
    this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label4->ForeColor = System::Drawing::Color::Black;
    this->label4->Location = System::Drawing::Point(55, 31);
    this->label4->Name = L"label4";
    this->label4->Size = System::Drawing::Size(174, 22);
    this->label4->TabIndex = 7;
    this->label4->Text = L"Examination Progress";
    this->label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // n4
    //
    this->n4->BackColor = System::Drawing::Color::Black;
    this->n4->Dock = System::Windows::Forms::DockStyle::Top;
    this->n4->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
    this->n4->LinkColor = System::Drawing::Color::White;
    this->n4->Location = System::Drawing::Point(51, 0);
    this->n4->Name = L"n4";
    this->n4->Size = System::Drawing::Size(287, 23);
    this->n4->TabIndex = 5;
    this->n4->TabStop = true;
    this->n4->Text = L"Basura Ratnayake";
    this->n4-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
    this->ttip->SetToolTip(this->n4, L"Your Friend's Username");
    //
    // p4
    //
    this->p4->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p4.BackgroundImage")));
    this->p4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->p4->Dock = System::Windows::Forms::DockStyle::Left;
    this->p4->Location = System::Drawing::Point(0, 0);
    this->p4->Name = L"p4";
    this->p4->Size = System::Drawing::Size(51, 75);
    this->p4->TabIndex = 4;
    this->p4->TabStop = false;
    this->ttip->SetToolTip(this->p4, L"Your Friend's Profile Image");
    //
    // f3
    //
    this->f3->BackColor = System::Drawing::Color::Transparent;
    this->f3->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f3.BackgroundImage")));
    this->f3->Controls->Add(this->pr3);
    this->f3->Controls->Add(this->er3);
    this->f3->Controls->Add(this->label6);
    this->f3->Controls->Add(this->label7);
    this->f3->Controls->Add(this->n3);

```

```

this->f3->Controls->Add(this->p3);
this->f3->Location = System::Drawing::Point(6, 154);
this->f3->Name = L"f3";
this->f3->Size = System::Drawing::Size(338, 75);
this->f3->TabIndex = 13;
this->f3->Visible = false;
//
// pr3
//
this->pr3->BackColor = System::Drawing::Color::Black;
this->pr3->ForeColor = System::Drawing::Color::Maroon;
this->pr3->Location = System::Drawing::Point(168, 31);
this->pr3->Name = L"pr3";
this->pr3->RightToLeft = System::Windows::Forms::RightToLeft::No;
this->pr3->Size = System::Drawing::Size(139, 20);
this->pr3->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
this->pr3->TabIndex = 6;
this->pr3->Value = 80;
//
// er3
//
this->er3->BackColor = System::Drawing::Color::DodgerBlue;
this->er3->Dock = System::Windows::Forms::DockStyle::Bottom;
this->er3->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->er3->ForeColor = System::Drawing::Color::Black;
this->er3->Location = System::Drawing::Point(51, 60);
this->er3->Name = L"er3";
this->er3->Size = System::Drawing::Size(287, 15);
this->er3->TabIndex = 10;
this->er3->Text = L"Passed = 42           Failed = 0";
this->er3-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
this->toltip->SetToolTip(this->er3, L"Passed and Failed Examination
Count");
//
// label6
//
this->label6->AutoSize = true;
this->label6->BackColor = System::Drawing::Color::Transparent;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label6->ForeColor = System::Drawing::Color::Black;
this->label6->Location = System::Drawing::Point(308, 29);
this->label6->Name = L"label6";
this->label6->Size = System::Drawing::Size(27, 24);
this->label6->TabIndex = 9;
this->label6->Text = L"%";
//
// label7
//
this->label7->BackColor = System::Drawing::Color::Transparent;
this->label7->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

        this->label7->ForeColor = System::Drawing::Color::Black;
        this->label7->Location = System::Drawing::Point(55, 31);
        this->label7->Name = L"label7";
        this->label7->Size = System::Drawing::Size(174, 22);
        this->label7->TabIndex = 7;
        this->label7->Text = L"Examination Progress";
        this->label7-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // n3
        //
        this->n3->BackColor = System::Drawing::Color::Black;
        this->n3->Dock = System::Windows::Forms::DockStyle::Top;
        this->n3->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
        this->n3->LinkColor = System::Drawing::Color::White;
        this->n3->Location = System::Drawing::Point(51, 0);
        this->n3->Name = L"n3";
        this->n3->Size = System::Drawing::Size(287, 23);
        this->n3->TabIndex = 5;
        this->n3->TabStop = true;
        this->n3->Text = L"Basura Ratnayake";
        this->n3-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->n3, L"Your Friend\''s Username");
        //
        // p3
        //
        this->p3->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p3.BackgroundImage")));
        this->p3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p3->Dock = System::Windows::Forms::DockStyle::Left;
        this->p3->Location = System::Drawing::Point(0, 0);
        this->p3->Name = L"p3";
        this->p3->Size = System::Drawing::Size(51, 75);
        this->p3->TabIndex = 4;
        this->p3->TabStop = false;
        this->ttip->SetToolTip(this->p3, L"Your Friend\''s Profile Image");
        //
        // f2
        //
        this->f2->BackColor = System::Drawing::Color::Transparent;
        this->f2->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f2.BackgroundImage")));
        this->f2->Controls->Add(this->pr2);
        this->f2->Controls->Add(this->er2);
        this->f2->Controls->Add(this->label9);
        this->f2->Controls->Add(this->label10);
        this->f2->Controls->Add(this->n2);
        this->f2->Controls->Add(this->p2);
        this->f2->Location = System::Drawing::Point(350, 73);
        this->f2->Name = L"f2";
        this->f2->Size = System::Drawing::Size(338, 75);
        this->f2->TabIndex = 12;
        this->f2->Visible = false;
        //
        // pr2
        //

```

```

        this->pr2->BackColor = System::Drawing::Color::Black;
        this->pr2->ForeColor = System::Drawing::Color::Maroon;
        this->pr2->Location = System::Drawing::Point(168, 31);
        this->pr2->Name = L"pr2";
        this->pr2->RightToLeft = System::Windows::Forms::RightToLeft::No;
        this->pr2->Size = System::Drawing::Size(139, 20);
        this->pr2->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
        this->pr2->TabIndex = 6;
        this->pr2->Value = 80;
        //
        // er2
        //
        this->er2->BackColor = System::Drawing::Color::DodgerBlue;
        this->er2->Dock = System::Windows::Forms::DockStyle::Bottom;
        this->er2->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->er2->ForeColor = System::Drawing::Color::Black;
        this->er2->Location = System::Drawing::Point(51, 60);
        this->er2->Name = L"er2";
        this->er2->Size = System::Drawing::Size(287, 15);
        this->er2->TabIndex = 10;
        this->er2->Text = L"Passed = 42           Failed = 0";
        this->er2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        this->ttip->SetToolTip(this->er2, L"Passed and Failed Examination
Count");
        //
        // label9
        //
        this->label9->AutoSize = true;
        this->label9->BackColor = System::Drawing::Color::Transparent;
        this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label9->ForeColor = System::Drawing::Color::Black;
        this->label9->Location = System::Drawing::Point(308, 29);
        this->label9->Name = L"label9";
        this->label9->Size = System::Drawing::Size(27, 24);
        this->label9->TabIndex = 9;
        this->label9->Text = L"%";
        //
        // label10
        //
        this->label10->BackColor = System::Drawing::Color::Transparent;
        this->label10->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label10->ForeColor = System::Drawing::Color::Black;
        this->label10->Location = System::Drawing::Point(55, 31);
        this->label10->Name = L"label10";
        this->label10->Size = System::Drawing::Size(174, 22);
        this->label10->TabIndex = 7;
        this->label10->Text = L"Examination Progress";
        this->label10-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //

```

```

// n2
//
this->n2->BackColor = System::Drawing::Color::Black;
this->n2->Dock = System::Windows::Forms::DockStyle::Top;
this->n2->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
this->n2->LinkColor = System::Drawing::Color::White;
this->n2->Location = System::Drawing::Point(51, 0);
this->n2->Name = L"n2";
this->n2->Size = System::Drawing::Size(287, 23);
this->n2->TabIndex = 5;
this->n2->TabStop = true;
this->n2->Text = L"Basura Ratnayake";
this->n2-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
this->ttip->SetToolTip(this->n2, L"Your Friend\`s Username");
//
// p2
//
this->p2->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p2.BackgroundImage")));
this->p2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->p2->Dock = System::Windows::Forms::DockStyle::Left;
this->p2->Location = System::Drawing::Point(0, 0);
this->p2->Name = L"p2";
this->p2->Size = System::Drawing::Size(51, 75);
this->p2->TabIndex = 4;
this->p2->TabStop = false;
this->ttip->SetToolTip(this->p2, L"Your Friend\`s Profile Image");
//
// f1
//
this->f1->BackColor = System::Drawing::Color::Transparent;
this->f1->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f1.BackgroundImage")));
this->f1->Controls->Add(this->pr1);
this->f1->Controls->Add(this->er1);
this->f1->Controls->Add(this->label12);
this->f1->Controls->Add(this->label13);
this->f1->Controls->Add(this->n1);
this->f1->Controls->Add(this->p1);
this->f1->Location = System::Drawing::Point(6, 73);
this->f1->Name = L"f1";
this->f1->Size = System::Drawing::Size(338, 75);
this->f1->TabIndex = 11;
this->f1->Visible = false;
//
// pr1
//
this->pr1->BackColor = System::Drawing::Color::Black;
this->pr1->ForeColor = System::Drawing::Color::Maroon;
this->pr1->Location = System::Drawing::Point(168, 31);
this->pr1->Name = L"pr1";
this->pr1->RightToLeft = System::Windows::Forms::RightToLeft::No;
this->pr1->Size = System::Drawing::Size(139, 20);
this->pr1->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
this->pr1->TabIndex = 6;

```

```

    this->pr1->Value = 80;
    //
    // er1
    //
    this->er1->BackColor = System::Drawing::Color::DodgerBlue;
    this->er1->Dock = System::Windows::Forms::DockStyle::Bottom;
    this->er1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->er1->ForeColor = System::Drawing::Color::Black;
    this->er1->Location = System::Drawing::Point(51, 60);
    this->er1->Name = L"er1";
    this->er1->Size = System::Drawing::Size(287, 15);
    this->er1->TabIndex = 10;
    this->er1->Text = L"Passed = 42           Failed = 0";
    this->er1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    this->ttip->SetToolTip(this->er1, L"Passed and Failed Examination
Count");
    //
    // label12
    //
    this->label12->AutoSize = true;
    this->label12->BackColor = System::Drawing::Color::Transparent;
    this->label12->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label12->ForeColor = System::Drawing::Color::Black;
    this->label12->Location = System::Drawing::Point(308, 29);
    this->label12->Name = L"label12";
    this->label12->Size = System::Drawing::Size(27, 24);
    this->label12->TabIndex = 9;
    this->label12->Text = L"%";
    //
    // label13
    //
    this->label13->BackColor = System::Drawing::Color::Transparent;
    this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label13->ForeColor = System::Drawing::Color::Black;
    this->label13->Location = System::Drawing::Point(55, 31);
    this->label13->Name = L"label13";
    this->label13->Size = System::Drawing::Size(174, 22);
    this->label13->TabIndex = 7;
    this->label13->Text = L"Examination Progress";
    this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // n1
    //
    this->n1->BackColor = System::Drawing::Color::Black;
    this->n1->Dock = System::Windows::Forms::DockStyle::Top;
    this->n1->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
    this->n1->LinkColor = System::Drawing::Color::White;
    this->n1->Location = System::Drawing::Point(51, 0);
    this->n1->Name = L"n1";

```

```

        this->n1->Size = System::Drawing::Size(287, 23);
        this->n1->TabIndex = 5;
        this->n1->TabStop = true;
        this->n1->Text = L"Basura Ratnayake";
        this->n1-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
        this->ttip->SetToolTip(this->n1, L"Your Friend\ 's Username");
        //
        // p1
        //
        this->p1->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1.BackgroundImage")));
        this->p1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->p1->Dock = System::Windows::Forms::DockStyle::Left;
        this->p1->Location = System::Drawing::Point(0, 0);
        this->p1->Name = L"p1";
        this->p1->Size = System::Drawing::Size(51, 75);
        this->p1->TabIndex = 4;
        this->p1->TabStop = false;
        this->ttip->SetToolTip(this->p1, L"Your Friend\ 's Profile Image");
        //
        // f10
        //
        this->f10->BackColor = System::Drawing::Color::Transparent;
        this->f10->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"f10.BackgroundImage")));
        this->f10->Controls->Add(this->pr10);
        this->f10->Controls->Add(this->er10);
        this->f10->Controls->Add(this->label21);
        this->f10->Controls->Add(this->label22);
        this->f10->Controls->Add(this->n10);
        this->f10->Controls->Add(this->p10);
        this->f10->Location = System::Drawing::Point(350, 396);
        this->f10->Name = L"f10";
        this->f10->Size = System::Drawing::Size(338, 75);
        this->f10->TabIndex = 16;
        this->f10->Visible = false;
        //
        // pr10
        //
        this->pr10->BackColor = System::Drawing::Color::Black;
        this->pr10->ForeColor = System::Drawing::Color::Maroon;
        this->pr10->Location = System::Drawing::Point(168, 31);
        this->pr10->Name = L"pr10";
        this->pr10->RightToLeft = System::Windows::Forms::RightToLeft::No;
        this->pr10->Size = System::Drawing::Size(139, 20);
        this->pr10->Style =
System::Windows::Forms::ProgressBarStyle::Continuous;
        this->pr10->TabIndex = 6;
        this->pr10->Value = 80;
        //
        // er10
        //
        this->er10->BackColor = System::Drawing::Color::DodgerBlue;
        this->er10->Dock = System::Windows::Forms::DockStyle::Bottom;
        this->er10->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

    this->er10->ForeColor = System::Drawing::Color::Black;
    this->er10->Location = System::Drawing::Point(51, 60);
    this->er10->Name = L"er10";
    this->er10->Size = System::Drawing::Size(287, 15);
    this->er10->TabIndex = 10;
    this->er10->Text = L"Passed = 42           Failed = 0";
    this->er10-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    this->toltip->SetToolTip(this->er10, L"Passed and Failed Examination
Count");
    //
    // label21
    //
    this->label21->AutoSize = true;
    this->label21->BackColor = System::Drawing::Color::Transparent;
    this->label21->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label21->ForeColor = System::Drawing::Color::Black;
    this->label21->Location = System::Drawing::Point(308, 29);
    this->label21->Name = L"label21";
    this->label21->Size = System::Drawing::Size(27, 24);
    this->label21->TabIndex = 9;
    this->label21->Text = L"%";
    //
    // label22
    //
    this->label22->BackColor = System::Drawing::Color::Transparent;
    this->label22->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label22->ForeColor = System::Drawing::Color::Black;
    this->label22->Location = System::Drawing::Point(55, 31);
    this->label22->Name = L"label22";
    this->label22->Size = System::Drawing::Size(174, 22);
    this->label22->TabIndex = 7;
    this->label22->Text = L"Examination Progress";
    this->label22-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // n10
    //
    this->n10->BackColor = System::Drawing::Color::Black;
    this->n10->Dock = System::Windows::Forms::DockStyle::Top;
    this->n10->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
    this->n10->LinkColor = System::Drawing::Color::White;
    this->n10->Location = System::Drawing::Point(51, 0);
    this->n10->Name = L"n10";
    this->n10->Size = System::Drawing::Size(287, 23);
    this->n10->TabIndex = 5;
    this->n10->TabStop = true;
    this->n10->Text = L"Basura Ratnayake";
    this->n10-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    this->toltip->SetToolTip(this->n10, L"Your Friend\'s Username");
    //
    // p10

```

```

//  

this->p10->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p10.BackgroundImage")));  

this->p10->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->p10->Dock = System::Windows::Forms::DockStyle::Left;  

this->p10->Location = System::Drawing::Point(0, 0);  

this->p10->Name = L"p10";  

this->p10->Size = System::Drawing::Size(51, 75);  

this->p10->TabIndex = 4;  

this->p10->TabStop = false;  

this->ttip->SetToolTip(this->p10, L"Your Friend's Profile Image");  

//  

// f9  

//  

this->f9->BackColor = System::Drawing::Color::Transparent;  

this->f9->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"f9.BackgroundImage")));  

this->f9->Controls->Add(this->pr9);  

this->f9->Controls->Add(this->er9);  

this->f9->Controls->Add(this->label24);  

this->f9->Controls->Add(this->label25);  

this->f9->Controls->Add(this->n9);  

this->f9->Controls->Add(this->p9);  

this->f9->Location = System::Drawing::Point(6, 396);  

this->f9->Name = L"f9";  

this->f9->Size = System::Drawing::Size(338, 75);  

this->f9->TabIndex = 15;  

this->f9->Visible = false;  

//  

// pr9  

//  

this->pr9->BackColor = System::Drawing::Color::Black;  

this->pr9->ForeColor = System::Drawing::Color::Maroon;  

this->pr9->Location = System::Drawing::Point(168, 31);  

this->pr9->Name = L"pr9";  

this->pr9->RightToLeft = System::Windows::Forms::RightToLeft::No;  

this->pr9->Size = System::Drawing::Size(139, 20);  

this->pr9->Style =  

System::Windows::Forms::ProgressBarStyle::Continuous;  

this->pr9->TabIndex = 6;  

this->pr9->Value = 80;  

//  

// er9  

//  

this->er9->BackColor = System::Drawing::Color::DodgerBlue;  

this->er9->Dock = System::Windows::Forms::DockStyle::Bottom;  

this->er9->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,  

System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->er9->ForeColor = System::Drawing::Color::Black;  

this->er9->Location = System::Drawing::Point(51, 60);  

this->er9->Name = L"er9";  

this->er9->Size = System::Drawing::Size(287, 15);  

this->er9->TabIndex = 10;  

this->er9->Text = L"Passed = 42           Failed = 0";
this->er9-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

```

```

        this->ttip->SetToolTip(this->er9, L"Passed and Failed Examination
Count");
    //
    // label24
    //
    this->label24->AutoSize = true;
    this->label24->BackColor = System::Drawing::Color::Transparent;
    this->label24->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label24->ForeColor = System::Drawing::Color::Black;
    this->label24->Location = System::Drawing::Point(308, 29);
    this->label24->Name = L"label24";
    this->label24->Size = System::Drawing::Size(27, 24);
    this->label24->TabIndex = 9;
    this->label24->Text = L"%";
    //
    // label25
    //
    this->label25->BackColor = System::Drawing::Color::Transparent;
    this->label25->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label25->ForeColor = System::Drawing::Color::Black;
    this->label25->Location = System::Drawing::Point(55, 31);
    this->label25->Name = L"label25";
    this->label25->Size = System::Drawing::Size(174, 22);
    this->label25->TabIndex = 7;
    this->label25->Text = L"Examination Progress";
    this->label25-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // n9
    //
    this->n9->BackColor = System::Drawing::Color::Black;
    this->n9->Dock = System::Windows::Forms::DockStyle::Top;
    this->n9->LinkBehavior =
System::Windows::Forms::LinkBehavior::HoverUnderline;
    this->n9->LinkColor = System::Drawing::Color::White;
    this->n9->Location = System::Drawing::Point(51, 0);
    this->n9->Name = L"n9";
    this->n9->Size = System::Drawing::Size(287, 23);
    this->n9->TabIndex = 5;
    this->n9->TabStop = true;
    this->n9->Text = L"Basura Ratnayake";
    this->n9-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
    this->ttip->SetToolTip(this->n9, L"Your Friend\'s Username");
    //
    // p9
    //
    this->p9->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p9.BackgroundImage")));
    this->p9->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->p9->Dock = System::Windows::Forms::DockStyle::Left;
    this->p9->Location = System::Drawing::Point(0, 0);
    this->p9->Name = L"p9";
    this->p9->Size = System::Drawing::Size(51, 75);

```

```

this->p9->TabIndex = 4;
this->p9->TabStop = false;
this->ttip->SetToolTip(this->p9, L"Your Friend\`s Profile Image");
//
// ttip
//
this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
this->ttip->ForeColor = System::Drawing::Color::White;
this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
this->ttip->ToolTipTitle = L"MOLE Advisor";
//
// baseF
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
(resources->GetObject(L"$this.BackgroundImage")));
this->ClientSize = System::Drawing::Size(696, 484);
this->Controls->Add(this->f10);
this->Controls->Add(this->f9);
this->Controls->Add(this->f4);
this->Controls->Add(this->f3);
this->Controls->Add(this->f2);
this->Controls->Add(this->f1);
this->Controls->Add(this->f8);
this->Controls->Add(this->f7);
this->Controls->Add(this->f6);
this->Controls->Add(this->f5);
this->Controls->Add(this->panel1);
this->ForeColor = System::Drawing::Color::Black;
this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
this->MaximizeBox = false;
this->MinimizeBox = false;
this->Name = L"baseF";
this->ShowIcon = false;
this->ShowInTaskbar = false;
this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
this->Text = L"Friend\`s Progress";
this->panel1->ResumeLayout(false);
this->f6->ResumeLayout(false);
this->f6->PerformLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p6))->EndInit();

this->f5->ResumeLayout(false);
this->f5->PerformLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p5))->EndInit();

this->f8->ResumeLayout(false);
this->f8->PerformLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p8))->EndInit();

this->f7->ResumeLayout(false);
this->f7->PerformLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p7))->EndInit();

```

```

        this->f4->ResumeLayout(false);
        this->f4->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p4))->EndInit();

        this->f3->ResumeLayout(false);
        this->f3->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p3))->EndInit();

        this->f2->ResumeLayout(false);
        this->f2->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p2))->EndInit();

        this->f1->ResumeLayout(false);
        this->f1->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p1))->EndInit();

        this->f10->ResumeLayout(false);
        this->f10->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p10))->EndInit();

        this->f9->ResumeLayout(false);
        this->f9->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>p9))->EndInit();

        this->ResumeLayout(false);

    }

#pragma endregion
};

}

```

viii. Calculators (mCalculator)



1. resource.h

```
//{{NO_DEPENDENCIES}}
// Microsoft Visual C++ generated include file.
// Used by mCalculator.rc
//
#define IDI_ICON1 101

// Next default values for new objects
//
#ifndef APSTUDIO_INVOKED
#ifndef APSTUDIO_READONLY_SYMBOLS
#define _APS_NEXT_RESOURCE_VALUE 102
#define _APS_NEXT_COMMAND_VALUE 40001
#define _APS_NEXT_CONTROL_VALUE 1001
#define _APS_NEXT_SYMED_VALUE 101
#endif
#endif
```

2. baseF.cpp

```
#include "baseF.h"

using namespace mCalculator; //the project name in your header file

[STAThreadAttribute]
int main(array<System::String ^> ^args)
{
    Application::EnableVisualStyles();
    Application::SetCompatibleTextRenderingDefault(false);

    Application::Run(gcnew baseF());
    return 0;
}
```

3. baseF.h

```
#pragma once
#include "apCal.h"
#include "gpCal.h"
#include "percen.h"
#include "bis.h"
#include "pyth.h"

namespace mCalculator {

    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 baseF
    /// </summary>
    public ref class baseF : public System::Windows::Forms::Form
    {
public:
    baseF(void)
    {
        InitializeComponent();
        //
        //TODO: Add the constructor code here
        //
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    ~baseF()
    {
        if (components)
```

```

        {
            delete components;
        }
    }

private: System::Windows::Forms::Button^ button1;
protected:
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::Button^ button11;
private: System::Windows::Forms::Button^ button12;
private: System::Windows::Forms::Button^ button13;
private: System::Windows::Forms::Button^ button15;
private: System::Windows::Forms::Button^ button22;
private: System::Windows::Forms::Button^ button23;
private: System::Windows::Forms::Button^ button24;
private: System::Windows::Forms::Button^ button25;
private: System::Windows::Forms::Button^ p1_17;
private: System::Windows::Forms::Button^ p1_22;
private: System::Windows::Forms::Button^ p1_2;
private: System::Windows::Forms::Button^ p1_5;
private: System::Windows::Forms::Button^ p1_4;
private: System::Windows::Forms::Button^ p1_3;
private: System::Windows::Forms::Button^ p1_12;
private: System::Windows::Forms::Button^ p1_21;
private: System::Windows::Forms::Button^ p1_16;
private: System::Windows::Forms::Button^ p1_15;
private: System::Windows::Forms::Button^ p1_14;
private: System::Windows::Forms::Button^ p1_13;
private: System::Windows::Forms::Button^ p1_11;
private: System::Windows::Forms::Button^ p1_24;
private: System::Windows::Forms::Button^ p1_23;
private: System::Windows::Forms::Button^ p1_20;
private: System::Windows::Forms::Button^ p1_19;
private: System::Windows::Forms::Button^ p1_18;
private: System::Windows::Forms::Button^ p1_1;
private: System::Windows::Forms::Button^ p1_10;
private: System::Windows::Forms::ToolTip^ ttip;
private: System::ComponentModel::.IContainer^ components;

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());

```

```

        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(baseF::typeid));
        this->button1 = (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->button11 = (gcnew System::Windows::Forms::Button());
        this->button12 = (gcnew System::Windows::Forms::Button());
        this->button13 = (gcnew System::Windows::Forms::Button());
        this->button15 = (gcnew System::Windows::Forms::Button());
        this->button22 = (gcnew System::Windows::Forms::Button());
        this->button23 = (gcnew System::Windows::Forms::Button());
        this->button24 = (gcnew System::Windows::Forms::Button());
        this->button25 = (gcnew System::Windows::Forms::Button());
        this->p1_17 = (gcnew System::Windows::Forms::Button());
        this->p1_22 = (gcnew System::Windows::Forms::Button());
        this->p1_2 = (gcnew System::Windows::Forms::Button());
        this->p1_5 = (gcnew System::Windows::Forms::Button());
        this->p1_4 = (gcnew System::Windows::Forms::Button());
        this->p1_3 = (gcnew System::Windows::Forms::Button());
        this->p1_12 = (gcnew System::Windows::Forms::Button());
        this->p1_21 = (gcnew System::Windows::Forms::Button());
        this->p1_16 = (gcnew System::Windows::Forms::Button());
        this->p1_15 = (gcnew System::Windows::Forms::Button());
        this->p1_14 = (gcnew System::Windows::Forms::Button());
        this->p1_13 = (gcnew System::Windows::Forms::Button());
        this->p1_11 = (gcnew System::Windows::Forms::Button());
        this->p1_24 = (gcnew System::Windows::Forms::Button());
        this->p1_23 = (gcnew System::Windows::Forms::Button());
        this->p1_20 = (gcnew System::Windows::Forms::Button());
        this->p1_19 = (gcnew System::Windows::Forms::Button());
        this->p1_18 = (gcnew System::Windows::Forms::Button());
        this->p1_1 = (gcnew System::Windows::Forms::Button());
        this->p1_10 = (gcnew System::Windows::Forms::Button());
        this->tTip = (gcnew System::Windows::Forms::ToolTip(this-
>components));
        this->SuspendLayout();
        //
        // button1
        //
        this->button1->BackColor = System::Drawing::Color::Transparent;
        this->button1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button1->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button1->FlatAppearance->BorderSize = 0;
        this->button1->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button1->ForeColor = System::Drawing::Color::White;
        this->button1->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button1.Image")));
        this->button1->Location = System::Drawing::Point(3, 239);
        this->button1->Name = L"button1";
        this->button1->Size = System::Drawing::Size(103, 78);
        this->button1->TabIndex = 314;
        this->tTip->SetToolTip(this->button1, L"Volume Calculator");

```

```

this->button1->UseVisualStyleBackColor = false;
//
// button3
//
this->button3->BackColor = System::Drawing::Color::Transparent;
this->button3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->button3->Cursor = System::Windows::Forms::Cursors::Hand;
this->button3->FlatAppearance->BorderSize = 0;
this->button3->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button3->ForeColor = System::Drawing::Color::White;
this->button3->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button3.Image")));
this->button3->Location = System::Drawing::Point(107, 89);
this->button3->Name = L"button3";
this->button3->Size = System::Drawing::Size(103, 78);
this->button3->TabIndex = 305;
this->ttip->SetToolTip(this->button3, L"Sets Calculator");
this->button3->UseVisualStyleBackColor = false;
//
// button4
//
this->button4->BackColor = System::Drawing::Color::Transparent;
this->button4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->button4->Cursor = System::Windows::Forms::Cursors::Hand;
this->button4->FlatAppearance->BorderSize = 0;
this->button4->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button4->ForeColor = System::Drawing::Color::White;
this->button4->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button4.Image")));
this->button4->Location = System::Drawing::Point(107, 11);
this->button4->Name = L"button4";
this->button4->Size = System::Drawing::Size(103, 78);
this->button4->TabIndex = 300;
this->ttip->SetToolTip(this->button4, L"Perimeter Calculator");
this->button4->UseVisualStyleBackColor = false;
//
// button5
//
this->button5->BackColor = System::Drawing::Color::Transparent;
this->button5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->button5->Cursor = System::Windows::Forms::Cursors::Hand;
this->button5->FlatAppearance->BorderSize = 0;
this->button5->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button5->ForeColor = System::Drawing::Color::White;
this->button5->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button5.Image")));
this->button5->Location = System::Drawing::Point(418, 10);
this->button5->Name = L"button5";
this->button5->Size = System::Drawing::Size(103, 78);
this->button5->TabIndex = 303;
this->ttip->SetToolTip(this->button5, L"Ratio Calculator");
this->button5->UseVisualStyleBackColor = false;
//
// button6
//

```

```

        this->button6->BackColor = System::Drawing::Color::Transparent;
        this->button6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button6->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button6->FlatAppearance->BorderSize = 0;
        this->button6->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button6->ForeColor = System::Drawing::Color::White;
        this->button6->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button6.Image")));
        this->button6->Location = System::Drawing::Point(314, 9);
        this->button6->Name = L"button6";
        this->button6->Size = System::Drawing::Size(103, 78);
        this->button6->TabIndex = 302;
        this->ttip->SetToolTip(this->button6, L"Pythagoras Theorem");
        this->button6->UseVisualStyleBackColor = false;
        this->button6->Click += gcnew System::EventHandler(this,
&baseF::button6_Click);
        //
        // button7
        //
        this->button7->BackColor = System::Drawing::Color::Transparent;
        this->button7->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button7->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button7->FlatAppearance->BorderSize = 0;
        this->button7->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button7->ForeColor = System::Drawing::Color::White;
        this->button7->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button7.Image")));
        this->button7->Location = System::Drawing::Point(210, 10);
        this->button7->Name = L"button7";
        this->button7->Size = System::Drawing::Size(103, 78);
        this->button7->TabIndex = 301;
        this->ttip->SetToolTip(this->button7, L"Probability Calculator");
        this->button7->UseVisualStyleBackColor = false;
        //
        // button8
        //
        this->button8->BackColor = System::Drawing::Color::Transparent;
        this->button8->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button8->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button8->FlatAppearance->BorderSize = 0;
        this->button8->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button8->ForeColor = System::Drawing::Color::White;
        this->button8->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button8.Image")));
        this->button8->Location = System::Drawing::Point(210, 88);
        this->button8->Name = L"button8";
        this->button8->Size = System::Drawing::Size(103, 78);
        this->button8->TabIndex = 306;
        this->ttip->SetToolTip(this->button8, L"Representation Calculator");
        this->button8->UseVisualStyleBackColor = false;
        //
        // button9
        //
        this->button9->BackColor = System::Drawing::Color::Transparent;

```

```

    this->button9->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button9->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button9->FlatAppearance->BorderSize = 0;
    this->button9->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button9->ForeColor = System::Drawing::Color::White;
    this->button9->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button9.Image")));
    this->button9->Location = System::Drawing::Point(107, 167);
    this->button9->Name = L"button9";
    this->button9->Size = System::Drawing::Size(103, 78);
    this->button9->TabIndex = 310;
    this->ttip->SetToolTip(this->button9, L"Real Number Calculator");
    this->button9->UseVisualStyleBackColor = false;
//
// button11
//
    this->button11->BackColor = System::Drawing::Color::Transparent;
    this->button11->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button11->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button11->FlatAppearance->BorderSize = 0;
    this->button11->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button11->ForeColor = System::Drawing::Color::White;
    this->button11->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button11.Image")));
    this->button11->Location = System::Drawing::Point(210, 165);
    this->button11->Name = L"button11";
    this->button11->Size = System::Drawing::Size(103, 78);
    this->button11->TabIndex = 313;
    this->ttip->SetToolTip(this->button11, L"Triangle Calculator");
    this->button11->UseVisualStyleBackColor = false;
//
// button12
//
    this->button12->BackColor = System::Drawing::Color::Transparent;
    this->button12->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button12->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button12->FlatAppearance->BorderSize = 0;
    this->button12->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button12->ForeColor = System::Drawing::Color::White;
    this->button12->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button12.Image")));
    this->button12->Location = System::Drawing::Point(418, 166);
    this->button12->Name = L"button12";
    this->button12->Size = System::Drawing::Size(103, 78);
    this->button12->TabIndex = 312;
    this->ttip->SetToolTip(this->button12, L"Trigonometry Calculator");
    this->button12->UseVisualStyleBackColor = false;
//
// button13
//
    this->button13->BackColor = System::Drawing::Color::Transparent;
    this->button13->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->button13->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button13->FlatAppearance->BorderSize = 0;

```

```

        this->button13->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button13->ForeColor = System::Drawing::Color::White;
        this->button13->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button13.Image")));
        this->button13->Location = System::Drawing::Point(314, 165);
        this->button13->Name = L"button13";
        this->button13->Size = System::Drawing::Size(103, 78);
        this->button13->TabIndex = 311;
        this->ttip->SetToolTip(this->button13, L"Tax and Insurance
Calculator");
        this->button13->UseVisualStyleBackColor = false;
        //
        // button15
        //
        this->button15->BackColor = System::Drawing::Color::Transparent;
        this->button15->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button15->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button15->FlatAppearance->BorderSize = 0;
        this->button15->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button15->ForeColor = System::Drawing::Color::White;
        this->button15->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button15.Image")));
        this->button15->Location = System::Drawing::Point(3, 167);
        this->button15->Name = L"button15";
        this->button15->Size = System::Drawing::Size(103, 78);
        this->button15->TabIndex = 309;
        this->ttip->SetToolTip(this->button15, L"Surface Area Calculator");
        this->button15->UseVisualStyleBackColor = false;
        //
        // button22
        //
        this->button22->BackColor = System::Drawing::Color::Transparent;
        this->button22->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button22->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button22->FlatAppearance->BorderSize = 0;
        this->button22->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button22->ForeColor = System::Drawing::Color::White;
        this->button22->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button22.Image")));
        this->button22->Location = System::Drawing::Point(3, 11);
        this->button22->Name = L"button22";
        this->button22->Size = System::Drawing::Size(103, 78);
        this->button22->TabIndex = 299;
        this->ttip->SetToolTip(this->button22, L"Percentage Calculator");
        this->button22->UseVisualStyleBackColor = false;
        this->button22->Click += gcnew System::EventHandler(this,
&baseF::button22_Click);
        //
        // button23
        //
        this->button23->BackColor = System::Drawing::Color::Transparent;
        this->button23->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button23->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button23->FlatAppearance->BorderSize = 0;
        this->button23->FlatStyle = System::Windows::Forms::FlatStyle::Flat;

```

```

        this->button23->ForeColor = System::Drawing::Color::White;
        this->button23->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button23.Image")));
        this->button23->Location = System::Drawing::Point(418, 88);
        this->button23->Name = L"button23";
        this->button23->Size = System::Drawing::Size(103, 78);
        this->button23->TabIndex = 308;
        this->ttip->SetToolTip(this->button23, L"Square Root Calculator");
        this->button23->UseVisualStyleBackColor = false;
    //
    // button24
    //
        this->button24->BackColor = System::Drawing::Color::Transparent;
        this->button24->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button24->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button24->FlatAppearance->BorderSize = 0;
        this->button24->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button24->ForeColor = System::Drawing::Color::White;
        this->button24->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button24.Image")));
        this->button24->Location = System::Drawing::Point(314, 87);
        this->button24->Name = L"button24";
        this->button24->Size = System::Drawing::Size(103, 78);
        this->button24->TabIndex = 307;
        this->ttip->SetToolTip(this->button24, L"Speed Calculator");
        this->button24->UseVisualStyleBackColor = false;
    //
    // button25
    //
        this->button25->BackColor = System::Drawing::Color::Transparent;
        this->button25->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->button25->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button25->FlatAppearance->BorderSize = 0;
        this->button25->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button25->ForeColor = System::Drawing::Color::White;
        this->button25->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"button25.Image")));
        this->button25->Location = System::Drawing::Point(3, 89);
        this->button25->Name = L"button25";
        this->button25->Size = System::Drawing::Size(103, 78);
        this->button25->TabIndex = 304;
        this->ttip->SetToolTip(this->button25, L"Rational Number
Calculator");
        this->button25->UseVisualStyleBackColor = false;
    //
    // p1_17
    //
        this->p1_17->BackColor = System::Drawing::Color::Transparent;
        this->p1_17->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_17->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_17->FlatAppearance->BorderSize = 0;
        this->p1_17->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_17->ForeColor = System::Drawing::Color::White;
        this->p1_17->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_17.Image")));

```

```

    this->p1_17->Location = System::Drawing::Point(210, 316);
    this->p1_17->Name = L"p1_17";
    this->p1_17->Size = System::Drawing::Size(103, 78);
    this->p1_17->TabIndex = 331;
    this->ttip->SetToolTip(this->p1_17, L"Inequality Calculator");
    this->p1_17->UseVisualStyleBackColor = false;
    //
    // p1_22
    //
    this->p1_22->BackColor = System::Drawing::Color::Transparent;
    this->p1_22->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_22->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_22->FlatAppearance->BorderSize = 0;
    this->p1_22->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_22->ForeColor = System::Drawing::Color::White;
    this->p1_22->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_22.Image")));
    this->p1_22->Location = System::Drawing::Point(210, 395);
    this->p1_22->Name = L"p1_22";
    this->p1_22->Size = System::Drawing::Size(103, 78);
    this->p1_22->TabIndex = 336;
    this->ttip->SetToolTip(this->p1_22, L"Matrice Calculator");
    this->p1_22->UseVisualStyleBackColor = false;
    //
    // p1_2
    //
    this->p1_2->BackColor = System::Drawing::Color::Transparent;
    this->p1_2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_2->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_2->FlatAppearance->BorderSize = 0;
    this->p1_2->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_2->ForeColor = System::Drawing::Color::White;
    this->p1_2->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_2.Image")));
    this->p1_2->Location = System::Drawing::Point(107, 394);
    this->p1_2->Name = L"p1_2";
    this->p1_2->Size = System::Drawing::Size(103, 78);
    this->p1_2->TabIndex = 316;
    this->ttip->SetToolTip(this->p1_2, L"Area Calculator");
    this->p1_2->UseVisualStyleBackColor = false;
    this->p1_2->Click += gcnew System::EventHandler(this,
&baseF::p1_2_Click);
    //
    // p1_5
    //
    this->p1_5->BackColor = System::Drawing::Color::Transparent;
    this->p1_5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_5->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_5->FlatAppearance->BorderSize = 0;
    this->p1_5->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_5->ForeColor = System::Drawing::Color::White;
    this->p1_5->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_5.Image")));
    this->p1_5->Location = System::Drawing::Point(518, 314);
    this->p1_5->Name = L"p1_5";

```

```

this->p1_5->Size = System::Drawing::Size(103, 78);
this->p1_5->TabIndex = 319;
this->ttip->SetToolTip(this->p1_5, L"Chord of a Circle Calculator");
this->p1_5->UseVisualStyleBackColor = false;
//
// p1_4
//
this->p1_4->BackColor = System::Drawing::Color::Transparent;
this->p1_4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_4->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_4->FlatAppearance->BorderSize = 0;
this->p1_4->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_4->ForeColor = System::Drawing::Color::White;
this->p1_4->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_4.Image")));
this->p1_4->Location = System::Drawing::Point(518, 393);
this->p1_4->Name = L"p1_4";
this->p1_4->Size = System::Drawing::Size(103, 78);
this->p1_4->TabIndex = 318;
this->ttip->SetToolTip(this->p1_4, L"Business and Shares
Calculator");
this->p1_4->UseVisualStyleBackColor = false;
this->p1_4->Click += gcnew System::EventHandler(this,
&baseF::p1_4_Click);
//
// p1_3
//
this->p1_3->BackColor = System::Drawing::Color::Transparent;
this->p1_3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_3->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_3->FlatAppearance->BorderSize = 0;
this->p1_3->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_3->ForeColor = System::Drawing::Color::White;
this->p1_3->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_3.Image")));
this->p1_3->Location = System::Drawing::Point(418, 394);
this->p1_3->Name = L"p1_3";
this->p1_3->Size = System::Drawing::Size(103, 78);
this->p1_3->TabIndex = 317;
this->ttip->SetToolTip(this->p1_3, L"Binomial Expressions");
this->p1_3->UseVisualStyleBackColor = false;
//
// p1_12
//
this->p1_12->BackColor = System::Drawing::Color::Transparent;
this->p1_12->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->p1_12->Cursor = System::Windows::Forms::Cursors::Hand;
this->p1_12->FlatAppearance->BorderSize = 0;
this->p1_12->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->p1_12->ForeColor = System::Drawing::Color::White;
this->p1_12->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_12.Image")));
this->p1_12->Location = System::Drawing::Point(210, 239);
this->p1_12->Name = L"p1_12";
this->p1_12->Size = System::Drawing::Size(103, 78);

```

```

    this->p1_12->TabIndex = 326;
    this->ttip->SetToolTip(this->p1_12, L"Fraction Calculator");
    this->p1_12->UseVisualStyleBackColor = false;
    //
    // p1_21
    //
    this->p1_21->BackColor = System::Drawing::Color::Transparent;
    this->p1_21->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_21->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_21->FlatAppearance->BorderSize = 0;
    this->p1_21->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_21->ForeColor = System::Drawing::Color::White;
    this->p1_21->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_21.Image")));
    this->p1_21->Location = System::Drawing::Point(3, 395);
    this->p1_21->Name = L"p1_21";
    this->p1_21->Size = System::Drawing::Size(103, 78);
    this->p1_21->TabIndex = 335;
    this->ttip->SetToolTip(this->p1_21, L"Logarithms Calculator");
    this->p1_21->UseVisualStyleBackColor = false;
    //
    // p1_16
    //
    this->p1_16->BackColor = System::Drawing::Color::Transparent;
    this->p1_16->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_16->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_16->FlatAppearance->BorderSize = 0;
    this->p1_16->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_16->ForeColor = System::Drawing::Color::White;
    this->p1_16->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_16.Image")));
    this->p1_16->Location = System::Drawing::Point(107, 319);
    this->p1_16->Name = L"p1_16";
    this->p1_16->Size = System::Drawing::Size(103, 78);
    this->p1_16->TabIndex = 330;
    this->ttip->SetToolTip(this->p1_16, L"Indices and Logarithm
Calculator");
    this->p1_16->UseVisualStyleBackColor = false;
    //
    // p1_15
    //
    this->p1_15->BackColor = System::Drawing::Color::Transparent;
    this->p1_15->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->p1_15->Cursor = System::Windows::Forms::Cursors::Hand;
    this->p1_15->FlatAppearance->BorderSize = 0;
    this->p1_15->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->p1_15->ForeColor = System::Drawing::Color::White;
    this->p1_15->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_15.Image")));
    this->p1_15->Location = System::Drawing::Point(518, 89);
    this->p1_15->Name = L"p1_15";
    this->p1_15->Size = System::Drawing::Size(103, 78);
    this->p1_15->TabIndex = 329;
    this->ttip->SetToolTip(this->p1_15, L"Graph Calculator");
    this->p1_15->UseVisualStyleBackColor = false;

```

```

//  

// p1_14  

//  

this->p1_14->BackColor = System::Drawing::Color::Transparent;  

this->p1_14->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_14->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_14->FlatAppearance->BorderSize = 0;  

this->p1_14->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_14->ForeColor = System::Drawing::Color::White;  

this->p1_14->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_14.Image")));  

this->p1_14->Location = System::Drawing::Point(518, 239);  

this->p1_14->Name = L"p1_14";  

this->p1_14->Size = System::Drawing::Size(103, 78);  

this->p1_14->TabIndex = 328;  

this->ttip->SetToolTip(this->p1_14, L"Geometric Progression  

Calculator");  

this->p1_14->UseVisualStyleBackColor = false;  

this->p1_14->Click += gcnew System::EventHandler(this,  

&baseF::p1_14_Click);  

//  

// p1_13  

//  

this->p1_13->BackColor = System::Drawing::Color::Transparent;  

this->p1_13->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_13->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_13->FlatAppearance->BorderSize = 0;  

this->p1_13->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_13->ForeColor = System::Drawing::Color::White;  

this->p1_13->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_13.Image")));  

this->p1_13->Location = System::Drawing::Point(314, 315);  

this->p1_13->Name = L"p1_13";  

this->p1_13->Size = System::Drawing::Size(103, 78);  

this->p1_13->TabIndex = 327;  

this->ttip->SetToolTip(this->p1_13, L"Frequency Distribution  

Calculator");  

this->p1_13->UseVisualStyleBackColor = false;  

//  

// p1_11  

//  

this->p1_11->BackColor = System::Drawing::Color::Transparent;  

this->p1_11->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_11->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_11->FlatAppearance->BorderSize = 0;  

this->p1_11->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_11->ForeColor = System::Drawing::Color::White;  

this->p1_11->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_11.Image")));  

this->p1_11->Location = System::Drawing::Point(107, 239);  

this->p1_11->Name = L"p1_11";  

this->p1_11->Size = System::Drawing::Size(103, 78);  

this->p1_11->TabIndex = 325;  

this->ttip->SetToolTip(this->p1_11, L"Equi-Angular Calculator");  

this->p1_11->UseVisualStyleBackColor = false;

```

```

//  

// p1_24  

//  

this->p1_24->BackColor = System::Drawing::Color::Transparent;  

this->p1_24->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_24->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_24->FlatAppearance->BorderSize = 0;  

this->p1_24->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_24->ForeColor = System::Drawing::Color::White;  

this->p1_24->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_24.Image")));  

this->p1_24->Location = System::Drawing::Point(418, 314);  

this->p1_24->Name = L"p1_24";  

this->p1_24->Size = System::Drawing::Size(103, 78);  

this->p1_24->TabIndex = 338;  

this->ttip->SetToolTip(this->p1_24, L"Number Base Calculator");  

this->p1_24->UseVisualStyleBackColor = false;  

//  

// p1_23  

//  

this->p1_23->BackColor = System::Drawing::Color::Transparent;  

this->p1_23->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_23->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_23->FlatAppearance->BorderSize = 0;  

this->p1_23->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_23->ForeColor = System::Drawing::Color::White;  

this->p1_23->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_23.Image")));  

this->p1_23->Location = System::Drawing::Point(314, 395);  

this->p1_23->Name = L"p1_23";  

this->p1_23->Size = System::Drawing::Size(103, 78);  

this->p1_23->TabIndex = 337;  

this->ttip->SetToolTip(this->p1_23, L"Mid Point Theorem  
Calculator");  

this->p1_23->UseVisualStyleBackColor = false;  

//  

// p1_20  

//  

this->p1_20->BackColor = System::Drawing::Color::Transparent;  

this->p1_20->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

this->p1_20->Cursor = System::Windows::Forms::Cursors::Hand;  

this->p1_20->FlatAppearance->BorderSize = 0;  

this->p1_20->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->p1_20->ForeColor = System::Drawing::Color::White;  

this->p1_20->Image = (cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"p1_20.Image")));  

this->p1_20->Location = System::Drawing::Point(518, 165);  

this->p1_20->Name = L"p1_20";  

this->p1_20->Size = System::Drawing::Size(103, 78);  

this->p1_20->TabIndex = 334;  

this->ttip->SetToolTip(this->p1_20, L"LCM Calculator");  

this->p1_20->UseVisualStyleBackColor = false;  

//  

// p1_19  

//

```

```

        this->p1_19->BackColor = System::Drawing::Color::Transparent;
        this->p1_19->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_19->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_19->FlatAppearance->BorderSize = 0;
        this->p1_19->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_19->ForeColor = System::Drawing::Color::White;
        this->p1_19->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_19.Image")));
        this->p1_19->Location = System::Drawing::Point(418, 239);
        this->p1_19->Name = L"p1_19";
        this->p1_19->Size = System::Drawing::Size(103, 78);
        this->p1_19->TabIndex = 333;
        this->ttip->SetToolTip(this->p1_19, L"Representation Data
Calculator");
        this->p1_19->UseVisualStyleBackColor = false;
//
// p1_18
//
        this->p1_18->BackColor = System::Drawing::Color::Transparent;
        this->p1_18->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_18->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_18->FlatAppearance->BorderSize = 0;
        this->p1_18->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_18->ForeColor = System::Drawing::Color::White;
        this->p1_18->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_18.Image")));
        this->p1_18->Location = System::Drawing::Point(314, 239);
        this->p1_18->Name = L"p1_18";
        this->p1_18->Size = System::Drawing::Size(103, 78);
        this->p1_18->TabIndex = 332;
        this->ttip->SetToolTip(this->p1_18, L"Algebraic Inequality
Calculator");
        this->p1_18->UseVisualStyleBackColor = false;
//
// p1_1
//
        this->p1_1->BackColor = System::Drawing::Color::Transparent;
        this->p1_1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        this->p1_1->Cursor = System::Windows::Forms::Cursors::Hand;
        this->p1_1->FlatAppearance->BorderSize = 0;
        this->p1_1->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->p1_1->ForeColor = System::Drawing::Color::White;
        this->p1_1->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"p1_1.Image")));
        this->p1_1->Location = System::Drawing::Point(3, 315);
        this->p1_1->Name = L"p1_1";
        this->p1_1->Size = System::Drawing::Size(103, 78);
        this->p1_1->TabIndex = 315;
        this->ttip->SetToolTip(this->p1_1, L"Arithmatic Progression
Calculator");
        this->p1_1->UseVisualStyleBackColor = false;
        this->p1_1->Click += gcnew System::EventHandler(this,
&baseF::p1_1_Click);
//
// p1_10

```

```

//  

>this->p1_10->BackColor = System::Drawing::Color::Transparent;  

>this->p1_10->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::None;  

>this->p1_10->Cursor = System::Windows::Forms::Cursors::Hand;  

>this->p1_10->FlatAppearance->BorderSize = 0;  

>this->p1_10->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

>this->p1_10->ForeColor = System::Drawing::Color::White;  

>this->p1_10->Image = (cli::safe_cast<System::Drawing::Image^  

>(resources->GetObject(L"p1_10.Image")));  

>this->p1_10->Location = System::Drawing::Point(518, 9);  

>this->p1_10->Name = L"p1_10";  

>this->p1_10->Size = System::Drawing::Size(103, 78);  

>this->p1_10->TabIndex = 324;  

>this->ttip->SetToolTip(this->p1_10, L"Cylinder Calculator");  

>this->p1_10->UseVisualStyleBackColor = false;  

//  

// ttip  

//  

>this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;  

>this->ttip->ForeColor = System::Drawing::Color::White;  

>this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;  

>this->ttip->ToolTipTitle = L"MOLE Advisor";  

//  

// baseF  

//  

>this->AutoScaleDimensions = System::Drawing::.SizeF(6, 13);  

>this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;  

>this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^  

>(resources->GetObject(L"$this.BackgroundImage")));  

>this->ClientSize = System::Drawing::Size(626, 486);  

>this->Controls->Add(this->p1_17);  

>this->Controls->Add(this->p1_22);  

>this->Controls->Add(this->p1_2);  

>this->Controls->Add(this->p1_5);  

>this->Controls->Add(this->p1_4);  

>this->Controls->Add(this->p1_3);  

>this->Controls->Add(this->p1_12);  

>this->Controls->Add(this->p1_21);  

>this->Controls->Add(this->p1_16);  

>this->Controls->Add(this->p1_15);  

>this->Controls->Add(this->p1_14);  

>this->Controls->Add(this->p1_13);  

>this->Controls->Add(this->p1_11);  

>this->Controls->Add(this->p1_24);  

>this->Controls->Add(this->p1_23);  

>this->Controls->Add(this->p1_20);  

>this->Controls->Add(this->p1_19);  

>this->Controls->Add(this->p1_18);  

>this->Controls->Add(this->p1_1);  

>this->Controls->Add(this->p1_10);  

>this->Controls->Add(this->button1);  

>this->Controls->Add(this->button3);  

>this->Controls->Add(this->button4);  

>this->Controls->Add(this->button5);  

>this->Controls->Add(this->button6);  

>this->Controls->Add(this->button7);  

>this->Controls->Add(this->button8);

```

```

        this->Controls->Add(this->button9);
        this->Controls->Add(this->button11);
        this->Controls->Add(this->button12);
        this->Controls->Add(this->button13);
        this->Controls->Add(this->button15);
        this->Controls->Add(this->button22);
        this->Controls->Add(this->button23);
        this->Controls->Add(this->button24);
        this->Controls->Add(this->button25);
        this->ForeColor = System::Drawing::Color::Black;
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
        this->Icon = (cli::safe_cast<System::Drawing::Icon^>(resources-
>GetObject(L"$this.Icon")));
        this->MaximizeBox = false;
        this->Name = L"baseF";
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"MOLE Calculator";
        this->ResumeLayout(false);

    }

#pragma endregion
    private: System::Void p1_2_Click(System::Object^ sender, System::EventArgs^ e) {

    }

private: System::Void p1_1_Click(System::Object^ sender, System::EventArgs^ e) {
    apCal a;
    a.ShowDialog();
}

private: System::Void p1_14_Click(System::Object^ sender, System::EventArgs^ e) {
    gpCal g;
    g.ShowDialog();
}

private: System::Void button22_Click(System::Object^ sender, System::EventArgs^ e) {
    percen p;
    p.ShowDialog();
}

private: System::Void p1_4_Click(System::Object^ sender, System::EventArgs^ e) {
    bis bb;
    bb.ShowDialog();
}

private: System::Void button6_Click(System::Object^ sender, System::EventArgs^ e) {
    pyth py;
    py.ShowDialog();
}

};

}

```

4. aStart.cpp (Area Calculator)

```
#include "aStart.h"
```

5. aStart.h (Area Calculator)

```
#pragma once

namespace mCalculator {

    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 aStart
    /// </summary>
    public ref class aStart : public System::Windows::Forms::Form
    {
    public:
        aStart(void)
        {
            InitializeComponent();
            //
            //TODO: Add the constructor code here
            //
        }

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

    protected:

    internal: System::Windows::Forms::Label^ Label5;

    internal: System::Windows::Forms::Label^ Label4;

    internal: System::Windows::Forms::Panel^ Panel6;
    internal: System::Windows::Forms::Panel^ Panel4;
    internal: System::Windows::Forms::PictureBox^ PictureBox13;
    internal: System::Windows::Forms::PictureBox^ PictureBox6;
    internal: System::Windows::Forms::PictureBox^ PictureBox5;
    internal: System::Windows::Forms::PictureBox^ PictureBox1;
```

```

internal: System::Windows::Forms::PictureBox^ PictureBox4;
internal: System::Windows::Forms::Panel^ Panel1;
internal: System::Windows::Forms::PictureBox^ PictureBox2;
internal: System::Windows::Forms::PictureBox^ PictureBox3;
internal: System::Windows::Forms::PictureBox^ PictureBox11;
internal: System::Windows::Forms::PictureBox^ PictureBox12;
internal: System::Windows::Forms::Panel^ Panel5;
internal: System::Windows::Forms::PictureBox^ PictureBox14;
internal: System::Windows::Forms::PictureBox^ PictureBox7;
internal: System::Windows::Forms::PictureBox^ PictureBox8;
internal: System::Windows::Forms::PictureBox^ PictureBox9;
internal: System::Windows::Forms::PictureBox^ PictureBox10;
private: System::Windows::Forms::PictureBox^ pictureBox15;
internal:

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
    System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(aStart::typeid));
        this->Label5 = (gcnew System::Windows::Forms::Label());
        this->Label4 = (gcnew System::Windows::Forms::Label());
        this->Panel6 = (gcnew System::Windows::Forms::Panel());
        this->Panel4 = (gcnew System::Windows::Forms::Panel());
        this->PictureBox13 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox6 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox5 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox1 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox4 = (gcnew System::Windows::Forms::PictureBox());
        this->Panel1 = (gcnew System::Windows::Forms::Panel());
        this->PictureBox2 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox3 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox11 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox12 = (gcnew System::Windows::Forms::PictureBox());
        this->Panel5 = (gcnew System::Windows::Forms::Panel());
        this->PictureBox14 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox7 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox8 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox9 = (gcnew System::Windows::Forms::PictureBox());
        this->PictureBox10 = (gcnew System::Windows::Forms::PictureBox());
        this->pictureBox15 = (gcnew System::Windows::Forms::PictureBox());
        this->Panel6->SuspendLayout();
        this->Panel4->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->PictureBox13))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->PictureBox6))->BeginInit();
    }

```

```

        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox5))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox1))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox4))->BeginInit();
        this->Panel1->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox2))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox3))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox11))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox12))->BeginInit();
        this->Panel5->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox14))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox7))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox8))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox9))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox10))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox15))->BeginInit();
        this->SuspendLayout();
        //
        // Label5
        //
        this->Label5->AutoSize = true;
        this->Label5->BackColor = System::Drawing::Color::Transparent;
        this->Label5->ForeColor = System::Drawing::Color::White;
        this->Label5->Location = System::Drawing::Point(202, 36);
        this->Label5->Name = L"Label5";
        this->Label5->Size = System::Drawing::Size(309, 13);
        this->Label5->TabIndex = 1;
        this->Label5->Text = L"Select a Fixed Shape from the Following to
explore more about it";
        //
        // Label4
        //
        this->Label4->AutoSize = true;
        this->Label4->Font = (gcnew System::Drawing::Font(L"Microsoft Sans
Serif", 12, System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->Label4->ForeColor = System::Drawing::Color::Black;
        this->Label4->Location = System::Drawing::Point(211, 3);
        this->Label4->Name = L"Label4";
        this->Label4->Size = System::Drawing::Size(299, 20);
        this->Label4->TabIndex = 0;
        this->Label4->Text = L"Area and Perimeter of Fixed Shapes";
        //
        // Panel6
        //
        this->Panel6->BackColor = System::Drawing::Color::Teal;

```

```

        this->Panel6->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->Panel6->Controls->Add(this->pictureBox15);
        this->Panel6->Controls->Add(this->Label14);
        this->Panel6->Location = System::Drawing::Point(-3, 0);
        this->Panel6->Name = L"Panel6";
        this->Panel6->Size = System::Drawing::Size(701, 31);
        this->Panel6->TabIndex = 0;
    //
    // Panel4
    //
        this->Panel4->BackColor = System::Drawing::Color::Transparent;
        this->Panel4->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->Panel4->Controls->Add(this->PictureBox13);
        this->Panel4->Controls->Add(this->PictureBox6);
        this->Panel4->Controls->Add(this->PictureBox5);
        this->Panel4->Controls->Add(this->PictureBox1);
        this->Panel4->Controls->Add(this->PictureBox4);
        this->Panel4->Location = System::Drawing::Point(14, 56);
        this->Panel4->Name = L"Panel4";
        this->Panel4->Size = System::Drawing::Size(665, 125);
        this->Panel4->TabIndex = 7;
    //
    // PictureBox13
    //
        this->PictureBox13->BackColor = System::Drawing::Color::DarkOrange;
        this->PictureBox13->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->PictureBox13->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->PictureBox13->Cursor = System::Windows::Forms::Cursors::Hand;
        this->PictureBox13->Location = System::Drawing::Point(531, 6);
        this->PictureBox13->Name = L"PictureBox13";
        this->PictureBox13->Size = System::Drawing::Size(125, 111);
        this->PictureBox13->TabIndex = 5;
        this->PictureBox13->TabStop = false;
    //
    // PictureBox6
    //
        this->PictureBox6->BackColor = System::Drawing::Color::DarkOrange;
        this->PictureBox6->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->PictureBox6->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->PictureBox6->Cursor = System::Windows::Forms::Cursors::Hand;
        this->PictureBox6->Location = System::Drawing::Point(400, 6);
        this->PictureBox6->Name = L"PictureBox6";
        this->PictureBox6->Size = System::Drawing::Size(125, 111);
        this->PictureBox6->TabIndex = 4;
        this->PictureBox6->TabStop = false;
    //
    // PictureBox5
    //
        this->PictureBox5->BackColor = System::Drawing::Color::White;
        this->PictureBox5->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->PictureBox5->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

    this->PictureBox5->Location = System::Drawing::Point(269, 6);
    this->PictureBox5->Name = L"PictureBox5";
    this->PictureBox5->Size = System::Drawing::Size(125, 111);
    this->PictureBox5->TabIndex = 3;
    this->PictureBox5->TabStop = false;
    //
    // PictureBox1
    //
    this->PictureBox1->BackColor = System::Drawing::Color::White;
    this->PictureBox1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->PictureBox1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->PictureBox1->Cursor = System::Windows::Forms::Cursors::Hand;
    this->PictureBox1->Location = System::Drawing::Point(7, 6);
    this->PictureBox1->Name = L"PictureBox1";
    this->PictureBox1->Size = System::Drawing::Size(125, 111);
    this->PictureBox1->TabIndex = 2;
    this->PictureBox1->TabStop = false;
    //
    // PictureBox4
    //
    this->PictureBox4->BackColor = System::Drawing::Color::DarkOrange;
    this->PictureBox4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->PictureBox4->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->PictureBox4->Cursor = System::Windows::Forms::Cursors::Hand;
    this->PictureBox4->Location = System::Drawing::Point(138, 6);
    this->PictureBox4->Name = L"PictureBox4";
    this->PictureBox4->Size = System::Drawing::Size(125, 111);
    this->PictureBox4->TabIndex = 1;
    this->PictureBox4->TabStop = false;
    //
    // Panel1
    //
    this->Panel1->BackColor = System::Drawing::Color::Transparent;
    this->Panel1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->Panel1->Controls->Add(this->PictureBox2);
    this->Panel1->Controls->Add(this->PictureBox3);
    this->Panel1->Controls->Add(this->PictureBox11);
    this->Panel1->Controls->Add(this->PictureBox12);
    this->Panel1->Location = System::Drawing::Point(68, 318);
    this->Panel1->Name = L"Panel1";
    this->Panel1->Size = System::Drawing::Size(535, 125);
    this->Panel1->TabIndex = 9;
    //
    // PictureBox2
    //
    this->PictureBox2->BackColor = System::Drawing::Color::White;
    this->PictureBox2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->PictureBox2->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->PictureBox2->Cursor = System::Windows::Forms::Cursors::Hand;
    this->PictureBox2->Location = System::Drawing::Point(400, 6);
    this->PictureBox2->Name = L"PictureBox2";

```

```

        this->PictureBox2->Size = System::Drawing::Size(125, 111);
        this->PictureBox2->TabIndex = 4;
        this->PictureBox2->TabStop = false;
    //
    // PictureBox3
    //
    this->PictureBox3->BackColor = System::Drawing::Color::DarkOrange;
    this->PictureBox3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->PictureBox3->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->PictureBox3->Cursor = System::Windows::Forms::Cursors::Hand;
    this->PictureBox3->Location = System::Drawing::Point(269, 6);
    this->PictureBox3->Name = L"PictureBox3";
    this->PictureBox3->Size = System::Drawing::Size(125, 111);
    this->PictureBox3->TabIndex = 3;
    this->PictureBox3->TabStop = false;
//
// PictureBox11
//
this->PictureBox11->BackColor = System::Drawing::Color::DarkOrange;
this->PictureBox11->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->PictureBox11->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->PictureBox11->Cursor = System::Windows::Forms::Cursors::Hand;
    this->PictureBox11->Location = System::Drawing::Point(7, 6);
    this->PictureBox11->Name = L"PictureBox11";
    this->PictureBox11->Size = System::Drawing::Size(125, 111);
    this->PictureBox11->TabIndex = 2;
    this->PictureBox11->TabStop = false;
//
// PictureBox12
//
this->PictureBox12->BackColor = System::Drawing::Color::White;
this->PictureBox12->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->PictureBox12->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->PictureBox12->Cursor = System::Windows::Forms::Cursors::Hand;
    this->PictureBox12->Location = System::Drawing::Point(138, 6);
    this->PictureBox12->Name = L"PictureBox12";
    this->PictureBox12->Size = System::Drawing::Size(125, 111);
    this->PictureBox12->TabIndex = 1;
    this->PictureBox12->TabStop = false;
//
// Panel5
//
this->Panel5->BackColor = System::Drawing::Color::Transparent;
this->Panel5->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->Panel5->Controls->Add(this->PictureBox14);
    this->Panel5->Controls->Add(this->PictureBox7);
    this->Panel5->Controls->Add(this->PictureBox8);
    this->Panel5->Controls->Add(this->PictureBox9);
    this->Panel5->Controls->Add(this->PictureBox10);
    this->Panel5->Location = System::Drawing::Point(14, 187);
    this->Panel5->Name = L"Panel5";

```

```

this->Panel5->Size = System::Drawing::Size(665, 125);
this->Panel5->TabIndex = 8;
//
// PictureBox14
//
this->PictureBox14->BackColor = System::Drawing::Color::White;
this->PictureBox14->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->PictureBox14->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->PictureBox14->Cursor = System::Windows::Forms::Cursors::Hand;
this->PictureBox14->Location = System::Drawing::Point(531, 6);
this->PictureBox14->Name = L"PictureBox14";
this->PictureBox14->Size = System::Drawing::Size(125, 111);
this->PictureBox14->TabIndex = 5;
this->PictureBox14->TabStop = false;
//
// PictureBox7
//
this->PictureBox7->BackColor = System::Drawing::Color::White;
this->PictureBox7->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->PictureBox7->Cursor = System::Windows::Forms::Cursors::Hand;
this->PictureBox7->Location = System::Drawing::Point(400, 6);
this->PictureBox7->Name = L"PictureBox7";
this->PictureBox7->Size = System::Drawing::Size(125, 111);
this->PictureBox7->TabIndex = 4;
this->PictureBox7->TabStop = false;
//
// PictureBox8
//
this->PictureBox8->BackColor = System::Drawing::Color::DarkOrange;
this->PictureBox8->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->PictureBox8->Cursor = System::Windows::Forms::Cursors::Hand;
this->PictureBox8->Location = System::Drawing::Point(269, 6);
this->PictureBox8->Name = L"PictureBox8";
this->PictureBox8->Size = System::Drawing::Size(125, 111);
this->PictureBox8->TabIndex = 3;
this->PictureBox8->TabStop = false;
//
// PictureBox9
//
this->PictureBox9->BackColor = System::Drawing::Color::DarkOrange;
this->PictureBox9->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->PictureBox9->Cursor = System::Windows::Forms::Cursors::Hand;
this->PictureBox9->Location = System::Drawing::Point(7, 6);
this->PictureBox9->Name = L"PictureBox9";
this->PictureBox9->Size = System::Drawing::Size(125, 111);
this->PictureBox9->TabIndex = 2;
this->PictureBox9->TabStop = false;
//
// PictureBox10
//
this->PictureBox10->BackColor = System::Drawing::Color::White;
this->PictureBox10->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;

```

```

        this->PictureBox10->Cursor = System::Windows::Forms::Cursors::Hand;
        this->PictureBox10->Location = System::Drawing::Point(138, 6);
        this->PictureBox10->Name = L"PictureBox10";
        this->PictureBox10->Size = System::Drawing::Size(125, 111);
        this->PictureBox10->TabIndex = 1;
        this->PictureBox10->TabStop = false;
        //
        // pictureBox15
        //
        this->pictureBox15->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox15.BackgroundImage")));
        this->pictureBox15->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox15->Location = System::Drawing::Point(663, 5);
        this->pictureBox15->Name = L"pictureBox15";
        this->pictureBox15->Size = System::Drawing::Size(23, 18);
        this->pictureBox15->TabIndex = 1;
        this->pictureBox15->TabStop = false;
        this->pictureBox15->Click += gcnew System::EventHandler(this,
&aStart::pictureBox15_Click);
        //
        // aStart
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"$this.BackgroundImage")));
        this->ClientSize = System::Drawing::Size(692, 456);
        this->Controls->Add(this->Panel14);
        this->Controls->Add(this->Label15);
        this->Controls->Add(this->Panel11);
        this->Controls->Add(this->Panel15);
        this->Controls->Add(this->Panel16);
        this->ForeColor = System::Drawing::Color::Black;
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::None;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"aStart";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"aStart";
        this->Panel6->ResumeLayout(false);
        this->Panel6->PerformLayout();
        this->Panel4->ResumeLayout(false);
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox13))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox6))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox5))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>PictureBox1))->EndInit();

```

```

        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox4))->EndInit();
        this->Panel1->ResumeLayout(false);
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox2))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox3))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox11))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox12))->EndInit();
        this->Panel5->ResumeLayout(false);
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox14))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox7))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox8))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox9))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>PictureBox10))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox15))->EndInit();
        this->ResumeLayout(false);
        this->PerformLayout();

    }
#pragma endregion
    private: System::Void pictureBox15_Click(System::Object^ sender,
System::EventArgs^ e) {
    }
};

}

```

6. apCal.cpp (Arithmetic Progressions)

Arithmetic Progression Number of Terms

Arithmetic Progressions **Calculator**

Select Calculation Type : $T_n = a + (n - 1) d$ $S_n = \frac{n}{2} [2a + (n - 1) d]$

$T_n = a + (n - 1) d$

Clear Values **Calculate**

Tip: Using Arithmetic Progressions Calculator
If you want to find the value of T_n then type ? inside T_n and fill all the other with Numerical Values. Similary if you want to find a or d or n . Use the above method but type ? inside the term you want to find.

Example: If you want to find a (first term) with values $T_n = 4$ $d = 2$ $n = 2$
then enter the values in this form
 $4 = ? + (2 - 1) 2$

Arithmetic Progression Sum of Terms

Arithmetic Progressions **Calculator**

Select Calculation Type : $T_n = a + (n - 1) d$ $S_n = \frac{n}{2} [2a + (n - 1) d]$

$S_n = \frac{n}{2} [2a + (n - 1) d]$

Clear Values **Calculate**

Tip: Using Arithmetic Progressions Calculator
If you want to find the value of S_n then type ? inside S_n and fill all the other with Numerical Values. Similary if you want to find a or d or n . Use the above method but type ? inside the term you want to find.

Example: If you want to find a (first term) with values $S_n = 4$ $d = 2$ $n = 2$
then enter the values in this form
 $4 = ? + (2 - 1) 2$

```
#include "apCal.h"
```

7. apCal.h (Arithmetic Progressions)

```
#pragma once
#include <ctype.h>
#include <array>

namespace mCalculator {

    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 apCal
    /// </summary>
public ref class apCal : public System::Windows::Forms::Form
{
public:
    apCal(void)
    {
        InitializeComponent();
        showP(ptn,"Number of Terms");
        tn->Checked=true;
    }

public:

internal: System::Windows::Forms::Panel^ panel3;
private:
internal: System::Windows::Forms::Label^ caln;
internal: System::Windows::Forms::Label^ label5;
internal: System::Windows::Forms::Label^ label9;
internal: System::Windows::Forms::Panel^ ps;

internal: System::Windows::Forms::RadioButton^ sn;
internal: System::Windows::Forms::RadioButton^ tn;

internal: System::Windows::Forms::Label^ label1;
internal: System::Windows::Forms::Panel^ ptn;
internal: System::Windows::Forms::Button^ clv;
internal: System::Windows::Forms::Label^ fa;
internal: System::Windows::Forms::Label^ s3;
internal: System::Windows::Forms::Label^ s2;
internal: System::Windows::Forms::Label^ tnl;
```

```

internal: System::Windows::Forms::Panel^  Panel4;
internal: System::Windows::Forms::TextBox^  n;
internal: System::Windows::Forms::TextBox^  d;
internal: System::Windows::Forms::Label^  Label7;
internal: System::Windows::Forms::Label^  Label8;
internal: System::Windows::Forms::TextBox^  a;
internal: System::Windows::Forms::Label^  label2;
internal: System::Windows::Forms::Label^  Label6;
internal: System::Windows::Forms::TextBox^  tnv;

internal: System::Windows::Forms::Label^  Label4;
internal: System::Windows::Forms::Label^  s1;
internal: System::Windows::Forms::Button^  calv;
internal: System::Windows::Forms::Panel^  panel1;
internal: System::Windows::Forms::PictureBox^  awrong;

internal: System::Windows::Forms::Panel^  pmb;
internal: System::Windows::Forms::Label^  Label18;
internal: System::Windows::Forms::Label^  Label12;
internal: System::Windows::Forms::PictureBox^  tnwrong;
internal: System::Windows::Forms::PictureBox^  dwrong;
internal: System::Windows::Forms::PictureBox^  nwrong;
internal: System::Windows::Forms::Panel^  psn;

internal: System::Windows::Forms::Button^  button1;
internal: System::Windows::Forms::Label^  sfa;

internal: System::Windows::Forms::Label^  ss3;

internal: System::Windows::Forms::Label^  ss2;
internal: System::Windows::Forms::Label^  st1;

internal: System::Windows::Forms::Panel^  panel5;
internal: System::Windows::Forms::Label^  snl;
internal: System::Windows::Forms::Button^  calSnV;

internal: System::Windows::Forms::Panel^  panel6;

internal: System::Windows::Forms::Panel^  panel7;
internal: System::Windows::Forms::Label^  label21;
internal: System::Windows::Forms::Label^  label22;
internal: System::Windows::Forms::PictureBox^  sawrong;

internal: System::Windows::Forms::TextBox^  sd;
internal: System::Windows::Forms::Label^  label14;
internal: System::Windows::Forms::TextBox^  ns;
internal: System::Windows::Forms::Label^  label15;
internal: System::Windows::Forms::Label^  label16;
internal: System::Windows::Forms::TextBox^  sa;
internal: System::Windows::Forms::Label^  label17;
internal: System::Windows::Forms::Label^  label19;
internal: System::Windows::Forms::Label^  label23;

```

```

internal: System::Windows::Forms::TextBox^ snn;
internal: System::Windows::Forms::TextBox^ snv;

internal: System::Windows::Forms::Label^ label24;
internal: System::Windows::Forms::Label^ label25;
internal: System::Windows::Forms::Label^ label26;
internal: System::Windows::Forms::PictureBox^ snwrong;
private: System::Windows::Forms::Label^ label3;
internal: System::Windows::Forms::PictureBox^ sdwrong;
private:
internal:

internal:

internal: System::Windows::Forms::PictureBox^ pst;

public:
public:

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

private: System::Windows::Forms::ToolTip^ ttip;

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

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
void InitializeComponent(void)
{
    this->components = (gcnew System::ComponentModel::Container());
}

```

```

System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(apCal::typeid));
this->ttip = (gcnew System::Windows::Forms::ToolTip(this-
>components));
this->sn = (gcnew System::Windows::Forms::RadioButton());
this->tn = (gcnew System::Windows::Forms::RadioButton());
this->panel3 = (gcnew System::Windows::Forms::Panel());
this->caln = (gcnew System::Windows::Forms::Label());
this->label5 = (gcnew System::Windows::Forms::Label());
this->label9 = (gcnew System::Windows::Forms::Label());
this->ps = (gcnew System::Windows::Forms::Panel());
this->label1 = (gcnew System::Windows::Forms::Label());
this->pst = (gcnew System::Windows::Forms::PictureBox());
this->ptn = (gcnew System::Windows::Forms::Panel());
this->clv = (gcnew System::Windows::Forms::Button());
this->fa = (gcnew System::Windows::Forms::Label());
this->s3 = (gcnew System::Windows::Forms::Label());
this->s2 = (gcnew System::Windows::Forms::Label());
this->tnl = (gcnew System::Windows::Forms::Label());
this->Panel4 = (gcnew System::Windows::Forms::Panel());
this->label2 = (gcnew System::Windows::Forms::Label());
this->d = (gcnew System::Windows::Forms::TextBox());
this->Label18 = (gcnew System::Windows::Forms::Label());
this->n = (gcnew System::Windows::Forms::TextBox());
this->Label17 = (gcnew System::Windows::Forms::Label());
this->a = (gcnew System::Windows::Forms::TextBox());
this->Label6 = (gcnew System::Windows::Forms::Label());
this->tnv = (gcnew System::Windows::Forms::TextBox());
this->Label4 = (gcnew System::Windows::Forms::Label());
this->s1 = (gcnew System::Windows::Forms::Label());
this->calv = (gcnew System::Windows::Forms::Button());
this->panel1 = (gcnew System::Windows::Forms::Panel());
this->awrong = (gcnew System::Windows::Forms::PictureBox());
this->pmb = (gcnew System::Windows::Forms::Panel());
this->Label18 = (gcnew System::Windows::Forms::Label());
this->Label12 = (gcnew System::Windows::Forms::Label());
this->tnwrong = (gcnew System::Windows::Forms::PictureBox());
this->dwrong = (gcnew System::Windows::Forms::PictureBox());
this->nwrong = (gcnew System::Windows::Forms::PictureBox());
this->psn = (gcnew System::Windows::Forms::Panel());
this->label3 = (gcnew System::Windows::Forms::Label());
this->button1 = (gcnew System::Windows::Forms::Button());
this->sfa = (gcnew System::Windows::Forms::Label());
this->ss3 = (gcnew System::Windows::Forms::Label());
this->ss2 = (gcnew System::Windows::Forms::Label());
this->stl = (gcnew System::Windows::Forms::Label());
this->panel5 = (gcnew System::Windows::Forms::Panel());
this->label19 = (gcnew System::Windows::Forms::Label());
this->sd = (gcnew System::Windows::Forms::TextBox());
this->label14 = (gcnew System::Windows::Forms::Label());
this->ns = (gcnew System::Windows::Forms::TextBox());
this->label15 = (gcnew System::Windows::Forms::Label());
this->label16 = (gcnew System::Windows::Forms::Label());
this->sa = (gcnew System::Windows::Forms::TextBox());
this->label17 = (gcnew System::Windows::Forms::Label());
this->label23 = (gcnew System::Windows::Forms::Label());
this->snn = (gcnew System::Windows::Forms::TextBox());
this->snv = (gcnew System::Windows::Forms::TextBox());

```

```

        this->label24 = (gcnew System::Windows::Forms::Label());
        this->label25 = (gcnew System::Windows::Forms::Label());
        this->label26 = (gcnew System::Windows::Forms::Label());
        this->sn1 = (gcnew System::Windows::Forms::Label());
        this->calSnV = (gcnew System::Windows::Forms::Button());
        this->panel6 = (gcnew System::Windows::Forms::Panel());
        this->panel7 = (gcnew System::Windows::Forms::Panel());
        this->label21 = (gcnew System::Windows::Forms::Label());
        this->label22 = (gcnew System::Windows::Forms::Label());
        this->sawrong = (gcnew System::Windows::Forms::PictureBox());
        this->snwrong = (gcnew System::Windows::Forms::PictureBox());
        this->sdwrong = (gcnew System::Windows::Forms::PictureBox());
        this->panel3->SuspendLayout();
        this->ps->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->pst))->BeginInit();
        this->ptn->SuspendLayout();
        this->Panel4->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->awrong))->BeginInit();
        this->pmb->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->tnwrong))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->dwrong))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->nwrong))->BeginInit();
        this->psn->SuspendLayout();
        this->panel5->SuspendLayout();
        this->panel7->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->sawrong))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->snwrong))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->sdwrong))->BeginInit();
        this->SuspendLayout();
        //
        // ttip
        //
        this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
        this->ttip->ForeColor = System::Drawing::Color::White;
        this->ttip->IsBalloon = true;
        this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
        this->ttip->ToolTipTitle = L"MOLE Advisor";
        //
        // sn
        //
        this->sn->AutoSize = true;
        this->sn->BackColor = System::Drawing::Color::Gold;
        this->sn->Cursor = System::Windows::Forms::.Cursors::Hand;
        this->sn->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->sn->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->sn->ForeColor = System::Drawing::Color::Maroon;
        this->sn->Location = System::Drawing::Point(399, 14);
        this->sn->Name = L"sn";

```

```

    this->sn->Size = System::Drawing::Size(13, 12);
    this->sn->TabIndex = 6;
    this->sn->TabStop = true;
    this->tip->SetToolTip(this->sn, L"Sum of Terms");
    this->sn->UseVisualStyleBackColor = false;
    this->sn->CheckedChanged += gcnew System::EventHandler(this,
&apCal::sn_CheckedChanged);
    //
    // tn
    //
    this->tn->AutoSize = true;
    this->tn->BackColor = System::Drawing::Color::Gold;
    this->tn->Cursor = System::Windows::Forms::Cursors::Hand;
    this->tn->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->tn->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->tn->ForeColor = System::Drawing::Color::Maroon;
    this->tn->Location = System::Drawing::Point(261, 14);
    this->tn->Name = L"tn";
    this->tn->Size = System::Drawing::Size(13, 12);
    this->tn->TabIndex = 5;
    this->tn->TabStop = true;
    this->tn->TextImageRelation =
System::Windows::Forms::TextImageRelation::TextAboveImage;
    this->tip->SetToolTip(this->tn, L"Number of Terms");
    this->tn->UseVisualStyleBackColor = false;
    this->tn->CheckedChanged += gcnew System::EventHandler(this,
&apCal::tn_CheckedChanged);
    //
    // panel3
    //
    this->panel3->BackColor = System::Drawing::Color::DodgerBlue;
    this->panel3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel3.BackgroundImage")));
    this->panel3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->panel3->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->panel3->Controls->Add(this->caln);
    this->panel3->Controls->Add(this->label15);
    this->panel3->Controls->Add(this->label19);
    this->panel3->Location = System::Drawing::Point(0, 0);
    this->panel3->Name = L"panel3";
    this->panel3->Size = System::Drawing::Size(641, 58);
    this->panel3->TabIndex = 5;
    //
    // caln
    //
    this->caln->BackColor = System::Drawing::Color::Transparent;
    this->caln->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->caln->Location = System::Drawing::Point(201, 31);
    this->caln->Name = L"caln";
    this->caln->Size = System::Drawing::Size(187, 14);
    this->caln->TabIndex = 2;

```

```

        this->caln->Text = L"Number of Terms";
        this->caln->TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
    //
    // label5
    //
    this->label5->BackColor = System::Drawing::Color::Black;
    this->label5->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label5->ForeColor = System::Drawing::Color::White;
    this->label5->Location = System::Drawing::Point(388, 14);
    this->label5->Name = L"label5";
    this->label5->Size = System::Drawing::Size(78, 31);
    this->label5->TabIndex = 0;
    this->label5->Text = L"Calculator";
    this->label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // label9
    //
    this->label9->AutoSize = true;
    this->label9->BackColor = System::Drawing::Color::Transparent;
    this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label9->Location = System::Drawing::Point(197, 12);
    this->label9->Name = L"label9";
    this->label9->Size = System::Drawing::Size(193, 19);
    this->label9->TabIndex = 1;
    this->label9->Text = L"Arithmatic Progressions";
    //
    // ps
    //
    this->ps->BackColor = System::Drawing::Color::Black;
    this->ps->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->ps->Controls->Add(this->sn);
    this->ps->Controls->Add(this->tn);
    this->ps->Controls->Add(this->label1);
    this->ps->Controls->Add(this->pst);
    this->ps->Location = System::Drawing::Point(-23, 57);
    this->ps->Name = L"ps";
    this->ps->Size = System::Drawing::Size(738, 40);
    this->ps->TabIndex = 6;
    //
    // label1
    //
    this->label1->AutoSize = true;
    this->label1->BackColor = System::Drawing::Color::Gold;
    this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label1->ForeColor = System::Drawing::Color::Black;
    this->label1->Location = System::Drawing::Point(113, 12);
    this->label1->Name = L"label1";
    this->label1->Size = System::Drawing::Size(139, 14);
    this->label1->TabIndex = 4;

```

```

        this->label1->Text = L"Select Calculation Type :";
        //
        // pst
        //
        this->pst->BackColor = System::Drawing::Color::Gold;
        this->pst->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"pst.BackgroundImage")));
        this->pst->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->pst->Location = System::Drawing::Point(110, -1);
        this->pst->Name = L"pst";
        this->pst->Size = System::Drawing::Size(444, 40);
        this->pst->TabIndex = 7;
        this->pst->TabStop = false;
        //
        // ptn
        //
        this->ptn->BackColor = System::Drawing::Color::Transparent;
        this->ptn->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->ptn->Controls->Add(this->clv);
        this->ptn->Controls->Add(this->fa);
        this->ptn->Controls->Add(this->s3);
        this->ptn->Controls->Add(this->s2);
        this->ptn->Controls->Add(this->tnl);
        this->ptn->Controls->Add(this->Panel4);
        this->ptn->Controls->Add(this->s1);
        this->ptn->Controls->Add(this->calv);
        this->ptn->Controls->Add(this->panel1);
        this->ptn->Controls->Add(this->awrong);
        this->ptn->Controls->Add(this->pmb);
        this->ptn->Controls->Add(this->tnwrong);
        this->ptn->Controls->Add(this->dwrong);
        this->ptn->Controls->Add(this->nwrong);
        this->ptn->Location = System::Drawing::Point(4, 326);
        this->ptn->Name = L"ptn";
        this->ptn->Size = System::Drawing::Size(100, 42);
        this->ptn->TabIndex = 7;
        this->ptn->Visible = false;
        //
        // clv
        //
        this->clv->BackColor = System::Drawing::Color::Maroon;
        this->clv->Cursor = System::Windows::Forms::Cursors::Cross;
        this->clv->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->clv->ForeColor = System::Drawing::Color::White;
        this->clv->Location = System::Drawing::Point(110, 82);
        this->clv->Name = L"clv";
        this->clv->Size = System::Drawing::Size(116, 23);
        this->clv->TabIndex = 9;
        this->clv->Text = L"Clear Values";
        this->clv->UseVisualStyleBackColor = false;
        //
        // fa
        //
        this->fa->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

this->fa->Location = System::Drawing::Point(453, 218);
this->fa->Name = L"fa";
this->fa->Size = System::Drawing::Size(143, 18);
this->fa->TabIndex = 23;
this->fa->Text = L"999999999999";
//
// s3
//
this->s3->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->s3->Location = System::Drawing::Point(456, 174);
this->s3->Name = L"s3";
this->s3->Size = System::Drawing::Size(156, 18);
this->s3->TabIndex = 22;
this->s3->Text = L"9999 + 9999";
//
// s2
//
this->s2->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->s2->Location = System::Drawing::Point(451, 96);
this->s2->Name = L"s2";
this->s2->Size = System::Drawing::Size(144, 18);
this->s2->TabIndex = 21;
this->s2->Text = L"(9999 - 9999) + 9999";
//
// tnl
//
this->tnl->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->tnl->Location = System::Drawing::Point(394, 97);
this->tnl->Name = L"tnl";
this->tnl->Size = System::Drawing::Size(40, 17);
this->tnl->TabIndex = 20;
this->tnl->Text = L"d";
this->tnl-> TextAlign = System::Drawing::ContentAlignment::TopRight;
//
// Panel4
//
this->Panel4->BackColor = System::Drawing::Color::Black;
this->Panel4->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->Panel4->Controls->Add(this->label2);
this->Panel4->Controls->Add(this->d);
this->Panel4->Controls->Add(this->Label18);
this->Panel4->Controls->Add(this->n);
this->Panel4->Controls->Add(this->Label17);
this->Panel4->Controls->Add(this->a);
this->Panel4->Controls->Add(this->Label16);
this->Panel4->Controls->Add(this->tnv);
this->Panel4->Controls->Add(this->Label14);
this->Panel4->Location = System::Drawing::Point(-5, -1);
this->Panel4->Name = L"Panel4";
this->Panel4->Size = System::Drawing::Size(393, 65);
this->Panel4->TabIndex = 12;

```

```

//
// label2
//
this->label2->BackColor = System::Drawing::Color::Black;
this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label2->ForeColor = System::Drawing::Color::Gold;
this->label2->Location = System::Drawing::Point(161, 14);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(21, 37);
this->label2->TabIndex = 12;
this->label2->Text = L"+";
this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// d
//
this->d->BackColor = System::Drawing::Color::Black;
this->d->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->d->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->d->ForeColor = System::Drawing::Color::White;
this->d->Location = System::Drawing::Point(279, 22);
this->d->MaxLength = 4;
this->d->Multiline = true;
this->d->Name = L"d";
this->d->Size = System::Drawing::Size(56, 23);
this->d->TabIndex = 17;
this->d->Text = L"d";
//
// Label8
//
this->Label8->AutoSize = true;
this->Label8->BackColor = System::Drawing::Color::Black;
this->Label8->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->Label8->ForeColor = System::Drawing::Color::Gold;
this->Label8->Location = System::Drawing::Point(262, 14);
this->Label8->Name = L"Label8";
this->Label8->Size = System::Drawing::Size(28, 37);
this->Label8->TabIndex = 16;
this->Label8->Text = L")";
//
// n
//
this->n->BackColor = System::Drawing::Color::Black;
this->n->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->n->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->n->ForeColor = System::Drawing::Color::White;
this->n->Location = System::Drawing::Point(191, 21);
this->n->MaxLength = 3;
this->n->Multiline = true;
this->n->Name = L"n";

```

```

this->n->Size = System::Drawing::Size(45, 22);
this->n->TabIndex = 14;
this->n->Text = L"n";
this->n-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// Label7
//
this->Label7->BackColor = System::Drawing::Color::Black;
this->Label7->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label7->ForeColor = System::Drawing::Color::Gold;
this->Label7->Location = System::Drawing::Point(225, 14);
this->Label7->Name = L"Label7";
this->Label7->Size = System::Drawing::Size(51, 37);
this->Label7->TabIndex = 15;
this->Label7->Text = L"- 1";
this->Label7-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// a
//
this->a->BackColor = System::Drawing::Color::Black;
this->a->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->a->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->a->ForeColor = System::Drawing::Color::White;
this->a->Location = System::Drawing::Point(117, 21);
this->a->MaxLength = 3;
this->a->Multiline = true;
this->a->Name = L"a";
this->a->Size = System::Drawing::Size(48, 23);
this->a->TabIndex = 2;
this->a->Text = L"a";
this->a-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// Label6
//
this->Label6->AutoSize = true;
this->Label6->BackColor = System::Drawing::Color::Black;
this->Label6->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->Label6->ForeColor = System::Drawing::Color::Gold;
this->Label6->Location = System::Drawing::Point(174, 11);
this->Label6->Name = L"Label6";
this->Label6->Size = System::Drawing::Size(28, 37);
this->Label6->TabIndex = 13;
this->Label6->Text = L"(";
//
// tnv
//
this->tnv->BackColor = System::Drawing::Color::Black;
this->tnv->BorderStyle = System::Windows::Forms::BorderStyle::None;

```

```

    this->tnv->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->tnv->ForeColor = System::Drawing::Color::White;
    this->tnv->Location = System::Drawing::Point(47, 21);
    this->tnv->MaxLength = 3;
    this->tnv->Multiline = true;
    this->tnv->Name = L"tnv";
    this->tnv->Size = System::Drawing::Size(57, 23);
    this->tnv->TabIndex = 1;
    this->tnv->Text = L"Tn";
    this->tnv-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Right;
    //
    // Label4
    //
    this->Label4->BackColor = System::Drawing::Color::Black;
    this->Label4->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->Label4->ForeColor = System::Drawing::Color::Gold;
    this->Label4->Location = System::Drawing::Point(101, 14);
    this->Label4->Name = L"Label4";
    this->Label4->Size = System::Drawing::Size(21, 37);
    this->Label4->TabIndex = 10;
    this->Label4->Text = L"=";
    this->Label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // s1
    //
    this->s1->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->s1->Location = System::Drawing::Point(391, 8);
    this->s1->Name = L"s1";
    this->s1->Size = System::Drawing::Size(231, 38);
    this->s1->TabIndex = 12;
    this->s1->Text = L"a = 9999      d = 9999      n = 999 Tn = \?";
    this->s1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // calv
    //
    this->calv->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"calv.BackgroundImage")));
    this->calv->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->calv->Cursor = System::Windows::Forms::Cursors::Hand;
    this->calv->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
    this->calv->Location = System::Drawing::Point(232, 82);
    this->calv->Name = L"calv";
    this->calv->Size = System::Drawing::Size(143, 23);
    this->calv->TabIndex = 3;
    this->calv->Text = L"Calculate";
    this->calv->UseVisualStyleBackColor = true;

```

```

        this->calv->Click += gcnew System::EventHandler(this,
&apCal::calv_Click);
        //
        // panel1
        //
        this->panel1->BackColor = System::Drawing::Color::Teal;
        this->panel1->Location = System::Drawing::Point(387, 8);
        this->panel1->Name = L"panel1";
        this->panel1->Size = System::Drawing::Size(1, 260);
        this->panel1->TabIndex = 11;
        //
        // awrong
        //
        this->awrong->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"awrong.Image")));
        this->awrong->Location = System::Drawing::Point(397, 195);
        this->awrong->Name = L"awrong";
        this->awrong->Size = System::Drawing::Size(37, 65);
        this->awrong->TabIndex = 19;
        this->awrong->TabStop = false;
        this->awrong->Visible = false;
        //
        // pmb
        //
        this->pmb->Controls->Add(this->Label18);
        this->pmb->Controls->Add(this->Label12);
        this->pmb->Location = System::Drawing::Point(5, 85);
        this->pmb->Name = L"pmb";
        this->pmb->Size = System::Drawing::Size(374, 172);
        this->pmb->TabIndex = 26;
        //
        // Label18
        //
        this->Label18->Location = System::Drawing::Point(3, 73);
        this->Label18->Name = L"Label18";
        this->Label18->Size = System::Drawing::Size(367, 99);
        this->Label18->TabIndex = 26;
        this->Label18->Text = resources->GetString(L"Label18.Text");
        //
        // Label12
        //
        this->Label12->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->Label12->Location = System::Drawing::Point(3, 57);
        this->Label12->Name = L"Label12";
        this->Label12->Size = System::Drawing::Size(348, 15);
        this->Label12->TabIndex = 28;
        this->Label12->Text = L"Tip: Using Arithmatic Progressions
Calculator\r\n";
        //
        // tnwrong
        //
        this->tnwrong->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"tnwrong.Image")));
        this->tnwrong->Location = System::Drawing::Point(388, 49);
        this->tnwrong->Name = L"tnwrong";
        this->tnwrong->Size = System::Drawing::Size(46, 20);

```

```

        this->tnwrong->TabIndex = 27;
        this->tnwrong->TabStop = false;
        this->tnwrong->Visible = false;
        //
        // dwrong
        //
        this->dwrong->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"dwrong.Image")));
        this->dwrong->Location = System::Drawing::Point(456, 195);
        this->dwrong->Name = L"dwrong";
        this->dwrong->Size = System::Drawing::Size(88, 65);
        this->dwrong->TabIndex = 28;
        this->dwrong->TabStop = false;
        this->dwrong->Visible = false;
        //
        // nwrong
        //
        this->nwrong->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"nwrong.Image")));
        this->nwrong->Location = System::Drawing::Point(388, 49);
        this->nwrong->Name = L"nwrong";
        this->nwrong->Size = System::Drawing::Size(31, 39);
        this->nwrong->TabIndex = 29;
        this->nwrong->TabStop = false;
        this->nwrong->Visible = false;
        //
        // psn
        //
        this->psn->BackColor = System::Drawing::Color::Transparent;
        this->psn->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->psn->Controls->Add(this->label3);
        this->psn->Controls->Add(this->button1);
        this->psn->Controls->Add(this->sfa);
        this->psn->Controls->Add(this->ss3);
        this->psn->Controls->Add(this->ss2);
        this->psn->Controls->Add(this->st1);
        this->psn->Controls->Add(this->panel5);
        this->psn->Controls->Add(this->sn1);
        this->psn->Controls->Add(this->calSnV);
        this->psn->Controls->Add(this->panel16);
        this->psn->Controls->Add(this->panel17);
        this->psn->Controls->Add(this->sawrong);
        this->psn->Controls->Add(this->snwrong);
        this->psn->Controls->Add(this->sdwrong);
        this->psn->Location = System::Drawing::Point(4, 101);
        this->psn->Name = L"psn";
        this->psn->Size = System::Drawing::Size(626, 267);
        this->psn->TabIndex = 8;
        this->psn->Visible = false;
        //
        // label3
        //
        this->label3->Enabled = false;
        this->label3->Location = System::Drawing::Point(443, 132);
        this->label3->Name = L"label3";
        this->label3->Size = System::Drawing::Size(100, 23);
        this->label3->TabIndex = 30;

```

```

// button1
//
this->button1->BackColor = System::Drawing::Color::Maroon;
this->button1->Cursor = System::Windows::Forms::Cursors::Cross;
this->button1->FlatStyle = System::Windows::Forms::FlatStyle::PopUp;
this->button1->ForeColor = System::Drawing::Color::White;
this->button1->Location = System::Drawing::Point(110, 82);
this->button1->Name = L"button1";
this->button1->Size = System::Drawing::Size(116, 23);
this->button1->TabIndex = 9;
this->button1->Text = L"Clear Values";
this->button1->UseVisualStyleBackColor = false;
//
// sfa
//
this->sfa->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->sfa->Location = System::Drawing::Point(437, 213);
this->sfa->Name = L"sfa";
this->sfa->Size = System::Drawing::Size(143, 18);
this->sfa->TabIndex = 23;
this->sfa->Text = L"999999999999";
//
// ss3
//
this->ss3->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ss3->Location = System::Drawing::Point(438, 171);
this->ss3->Name = L"ss3";
this->ss3->Size = System::Drawing::Size(156, 18);
this->ss3->TabIndex = 22;
this->ss3->Text = L"9999 + 9999";
//
// ss2
//
this->ss2->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ss2->Location = System::Drawing::Point(438, 126);
this->ss2->Name = L"ss2";
this->ss2->Size = System::Drawing::Size(174, 18);
this->ss2->TabIndex = 21;
this->ss2->Text = L"(9999 - 9999) + 9999";
//
// stl
//
this->stl->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->stl->Location = System::Drawing::Point(385, 124);
this->stl->Name = L"stl";
this->stl->Size = System::Drawing::Size(34, 17);
this->stl->TabIndex = 20;
this->stl->Text = L"d";
this->stl-> TextAlign = System::Drawing::ContentAlignment::TopRight;

```

```

//
// panel5
//
this->panel5->BackColor = System::Drawing::Color::Black;
this->panel5->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->panel5->Controls->Add(this->label19);
this->panel5->Controls->Add(this->sd);
this->panel5->Controls->Add(this->label14);
this->panel5->Controls->Add(this->ns);
this->panel5->Controls->Add(this->label15);
this->panel5->Controls->Add(this->label16);
this->panel5->Controls->Add(this->sa);
this->panel5->Controls->Add(this->label17);
this->panel5->Controls->Add(this->label23);
this->panel5->Controls->Add(this->snn);
this->panel5->Controls->Add(this->snv);
this->panel5->Controls->Add(this->label24);
this->panel5->Controls->Add(this->label25);
this->panel5->Controls->Add(this->label26);
this->panel5->Location = System::Drawing::Point(-5, -1);
this->panel5->Name = L"panel5";
this->panel5->Size = System::Drawing::Size(393, 65);
this->panel5->TabIndex = 12;
//
// label19
//
this->label19->AutoSize = true;
this->label19->BackColor = System::Drawing::Color::Black;
this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label19->ForeColor = System::Drawing::Color::Gold;
this->label19->Location = System::Drawing::Point(216, 8);
this->label19->Name = L"label19";
this->label19->Size = System::Drawing::Size(28, 37);
this->label19->TabIndex = 34;
this->label19->Text = L "(";
//
// sd
//
this->sd->BackColor = System::Drawing::Color::Black;
this->sd->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->sd->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->sd->ForeColor = System::Drawing::Color::White;
this->sd->Location = System::Drawing::Point(321, 18);
this->sd->MaxLength = 3;
this->sd->Multiline = true;
this->sd->Name = L"sd";
this->sd->Size = System::Drawing::Size(47, 22);
this->sd->TabIndex = 37;
this->sd->Text = L"d";
this->sd-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// label14

```

```

//  

this->label14->AutoSize = true;  

this->label14->BackColor = System::Drawing::Color::Black;  

this->label14->Font = (gcnew System::Drawing::Font(L"Arial", 27.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->label14->ForeColor = System::Drawing::Color::Gold;  

this->label14->Location = System::Drawing::Point(357, 5);  

this->label14->Name = L"label14";  

this->label14->Size = System::Drawing::Size(32, 44);  

this->label14->TabIndex = 35;  

this->label14->Text = L"]";  

//  

// ns  

//  

this->ns->BackColor = System::Drawing::Color::Black;  

this->ns->BorderStyle = System::Windows::Forms::BorderStyle::None;  

this->ns->Font = (gcnew System::Drawing::Font(L"Arial", 14,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->ns->ForeColor = System::Drawing::Color::White;  

this->ns->Location = System::Drawing::Point(231, 18);  

this->ns->MaxLength = 3;  

this->ns->Multiline = true;  

this->ns->Name = L"ns";  

this->ns->Size = System::Drawing::Size(47, 23);  

this->ns->TabIndex = 31;  

this->ns->Text = L"\n";  

this->ns-> TextAlign =  

System::Windows::Forms::HorizontalAlignment::Center;  

//  

// label15  

//  

this->label15->BackColor = System::Drawing::Color::Black;  

this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 14,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->label15->ForeColor = System::Drawing::Color::Gold;  

this->label15->Location = System::Drawing::Point(272, 12);  

this->label15->Name = L"label15";  

this->label15->Size = System::Drawing::Size(38, 37);  

this->label15->TabIndex = 30;  

this->label15->Text = L"+ 1";  

this->label15-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

//  

// label16  

//  

this->label16->AutoSize = true;  

this->label16->BackColor = System::Drawing::Color::Black;  

this->label16->Font = (gcnew System::Drawing::Font(L"Arial", 24,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->label16->ForeColor = System::Drawing::Color::Gold;  

this->label16->Location = System::Drawing::Point(303, 8);  

this->label16->Name = L"label16";  

this->label16->Size = System::Drawing::Size(28, 37);  

this->label16->TabIndex = 36;

```

```

this->label16->Text = L")";
//
// sa
//
this->sa->BackColor = System::Drawing::Color::Black;
this->sa->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->sa->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->sa->ForeColor = System::Drawing::Color::White;
this->sa->Location = System::Drawing::Point(152, 16);
this->sa->MaxLength = 3;
this->sa->Multiline = true;
this->sa->Name = L"sa";
this->sa->Size = System::Drawing::Size(52, 22);
this->sa->TabIndex = 29;
this->sa->Text = L"a";
this->sa-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// label17
//
this->label17->BackColor = System::Drawing::Color::Black;
this->label17->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label17->ForeColor = System::Drawing::Color::Gold;
this->label17->Location = System::Drawing::Point(199, 11);
this->label17->Name = L"label17";
this->label17->Size = System::Drawing::Size(21, 37);
this->label17->TabIndex = 27;
this->label17->Text = L"+";
this->label17-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// label23
//
this->label23->AutoSize = true;
this->label23->BackColor = System::Drawing::Color::Black;
this->label23->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label23->ForeColor = System::Drawing::Color::Gold;
this->label23->Location = System::Drawing::Point(122, 16);
this->label23->Name = L"label23";
this->label23->Size = System::Drawing::Size(42, 22);
this->label23->TabIndex = 33;
this->label23->Text = L"2 x ";
//
// snn
//
this->snn->BackColor = System::Drawing::Color::Black;
this->snn->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->snn->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->snn->ForeColor = System::Drawing::Color::White;
this->snn->Location = System::Drawing::Point(64, 4);

```

```

        this->snn->MaxLength = 3;
        this->snn->Multiline = true;
        this->snn->Name = L"snn";
        this->snn->Size = System::Drawing::Size(47, 23);
        this->snn->TabIndex = 26;
        this->snn->Text = L"\n";
        this->snn-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
        this->snn->TextChanged += gcnew System::EventHandler(this,
&apCal::snn_TextChanged);
        //
        // snv
        //
        this->snv->BackColor = System::Drawing::Color::Black;
        this->snv->BorderStyle = System::Windows::Forms::BorderStyle::None;
        this->snv->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->snv->ForeColor = System::Drawing::Color::White;
        this->snv->Location = System::Drawing::Point(7, 18);
        this->snv->MaxLength = 3;
        this->snv->Multiline = true;
        this->snv->Name = L"snv";
        this->snv->Size = System::Drawing::Size(44, 23);
        this->snv->TabIndex = 24;
        this->snv->Text = L"Sn";
        this->snv-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Right;
        //
        // label24
        //
        this->label24->BackColor = System::Drawing::Color::Black;
        this->label24->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label24->ForeColor = System::Drawing::Color::Gold;
        this->label24->Location = System::Drawing::Point(49, 11);
        this->label24->Name = L"label24";
        this->label24->Size = System::Drawing::Size(21, 37);
        this->label24->TabIndex = 25;
        this->label24->Text = L"=";
        this->label24-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label25
        //
        this->label25->BackColor = System::Drawing::Color::Black;
        this->label25->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label25->ForeColor = System::Drawing::Color::Gold;
        this->label25->Location = System::Drawing::Point(61, -9);
        this->label25->Name = L"label25";
        this->label25->Size = System::Drawing::Size(54, 81);
        this->label25->TabIndex = 32;
        this->label25->Text = L"__\r\n2";
        this->label25-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

```

```

//  

// label26  

//  

this->label26->AutoSize = true;  

this->label26->BackColor = System::Drawing::Color::Black;  

this->label26->Font = (gcnew System::Drawing::Font(L"Arial", 27.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->label26->ForeColor = System::Drawing::Color::Gold;  

this->label26->Location = System::Drawing::Point(105, 1);  

this->label26->Name = L"label26";  

this->label26->Size = System::Drawing::Size(42, 44);  

this->label26->TabIndex = 28;  

this->label26->Text = L"[ ";  

//  

// snl  

//  

this->snl->Font = (gcnew System::Drawing::Font(L"Arial", 11,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->snl->Location = System::Drawing::Point(391, 8);  

this->snl->Name = L"snl";  

this->snl->Size = System::Drawing::Size(231, 38);  

this->snl->TabIndex = 12;  

this->snl->Text = L"a = 9999      d = 9999      n = 999 Tn = \?";  

this->snl-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

//  

// calSnV  

//  

this->calSnV->BackgroundImage =  

(cli::safe_cast<System::Drawing::Image^>(resources->  

>GetObject(L"calSnV.BackgroundImage")));  

this->calSnV->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->calSnV->Cursor = System::Windows::Forms::Cursors::Hand;  

this->calSnV->FlatStyle = System::Windows::Forms::FlatStyle::Popup;  

this->calSnV->Location = System::Drawing::Point(232, 82);  

this->calSnV->Name = L"calSnV";  

this->calSnV->Size = System::Drawing::Size(143, 23);  

this->calSnV->TabIndex = 3;  

this->calSnV->Text = L"Calculate";  

this->calSnV->UseVisualStyleBackColor = true;  

this->calSnV->Click += gcnew System::EventHandler(this,  

&apCal::calSnV_Click);  

//  

// panel6  

//  

this->panel6->BackColor = System::Drawing::Color::Teal;  

this->panel6->Location = System::Drawing::Point(387, 8);  

this->panel6->Name = L"panel6";  

this->panel6->Size = System::Drawing::Size(1, 260);  

this->panel6->TabIndex = 11;  

//  

// panel7  

//  

this->panel7->Controls->Add(this->label21);  

this->panel7->Controls->Add(this->label22);

```

```

this->panel7->Location = System::Drawing::Point(5, 85);
this->panel7->Name = L"panel7";
this->panel7->Size = System::Drawing::Size(374, 172);
this->panel7->TabIndex = 26;
//
// label21
//
this->label21->Location = System::Drawing::Point(3, 73);
this->label21->Name = L"label21";
this->label21->Size = System::Drawing::Size(367, 99);
this->label21->TabIndex = 26;
this->label21->Text = resources->GetString(L"label21.Text");
//
// label22
//
this->label22->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label22->Location = System::Drawing::Point(3, 57);
this->label22->Name = L"label22";
this->label22->Size = System::Drawing::Size(348, 15);
this->label22->TabIndex = 28;
this->label22->Text = L"Tip: Using Arithmetic Progressions
Calculator\r\n";
//
// sawrong
//
this->sawrong->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"sawrong.Image")));
this->sawrong->Location = System::Drawing::Point(573, 215);
this->sawrong->Name = L"sawrong";
this->sawrong->Size = System::Drawing::Size(50, 45);
this->sawrong->TabIndex = 27;
this->sawrong->TabStop = false;
this->sawrong->Visible = false;
//
// snwrong
//
this->snwrong->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"snwrong.Image")));
this->snwrong->Location = System::Drawing::Point(394, 232);
this->snwrong->Name = L"snwrong";
this->snwrong->Size = System::Drawing::Size(10, 28);
this->snwrong->TabIndex = 29;
this->snwrong->TabStop = false;
this->snwrong->Visible = false;
//
// sdwrong
//
this->sdwrong->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"sdwrong.Image")));
this->sdwrong->Location = System::Drawing::Point(388, 49);
this->sdwrong->Name = L"sdwrong";
this->sdwrong->Size = System::Drawing::Size(235, 211);
this->sdwrong->TabIndex = 31;
this->sdwrong->TabStop = false;
this->sdwrong->Visible = false;
//

```

```

// apCal
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
this->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Center;
this->ClientSize = System::Drawing::Size(637, 378);
this->Controls->Add(this->psn);
this->Controls->Add(this->ptn);
this->Controls->Add(this->ps);
this->Controls->Add(this->panel3);
this->ForeColor = System::Drawing::Color::Black;
this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
this->MaximizeBox = false;
this->MinimizeBox = false;
this->Name = L"apCal";
this->ShowIcon = false;
this->ShowInTaskbar = false;
this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
this->Text = L"Arithmatic Progression Calculator";
this->panel3->ResumeLayout(false);
this->panel3->PerformLayout();
this->ps->ResumeLayout(false);
this->ps->PerformLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pst))->EndInit();
this->ptn->ResumeLayout(false);
this->Panel4->ResumeLayout(false);
this->Panel4->PerformLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>awrong))->EndInit();
this->pmb->ResumeLayout(false);
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>tnwrong))->EndInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>dwrong))->EndInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>nwrong))->EndInit();
this->psn->ResumeLayout(false);
this->panel5->ResumeLayout(false);
this->panel5->PerformLayout();
this->panel7->ResumeLayout(false);
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>sawrong))->EndInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>snwrong))->EndInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>sdwrong))->EndInit();
this->ResumeLayout(false);

}

#pragma endregion
void showP(Panel^ p, String^ msg){

```

```

        p->Location = System::Drawing::Point(117,103);
        p->Size = System::Drawing::Size(387,267);
        p->BringToFront();
        p->Visible=true;
        caln->Text=msg;
        this->Text="Arithmatic Progression "+msg;
    }
    double av, dv, nv, tsnv;
    void setData(String^ x, String^ b, String^ c, String^ z){
        av =System::Convert::.ToDouble(x);
        dv = System::Convert::.ToDouble(b);
        nv=System::Convert::.ToDouble(c);
        tsnv=System::Convert::.ToDouble(z);
    }
    Boolean detValues(TextBox^ aa, TextBox^ dd, TextBox^ nn, TextBox^ tsn){
        if(aa->Text != "" || dd->Text != "" || nn->Text != "" || tsn->Text
        != ""){
            try{
                if(aa->Text == "?" && dd->Text != "" && nn->Text != ""
                && tsn->Text != ""){
                    setData("0",dd->Text,nn->Text, tsn->Text);
                    dwrong->Visible=false;
                    nwrong->Visible=false;
                    tnwrong->Visible=false;
                    return true;
                }else if(dd->Text == "?" && aa->Text != "" && nn->Text
                != "" && tsn->Text != ""){
                    setData(aa->Text, "0", nn->Text, tsn->Text);
                    awrong->Visible=false;
                    nwrong->Visible=false;
                    tnwrong->Visible=false;
                    return true;
                }else if(nn->Text == "?" && aa->Text != "" && dd->Text
                != "" && tsn->Text != ""){
                    setData(aa->Text, dd->Text, "0", tsn->Text);
                    nwrong->Visible=false;
                    nwrong->Visible=false;
                    tnwrong->Visible=false;
                    return true;
                }else if(tsn->Text == "?" && aa->Text != "" && dd->Text
                != "" && nn->Text != ""){
                    setData(aa->Text, dd->Text, nn->Text, "0");
                    awrong->Visible=false;
                    nwrong->Visible=false;
                    dwrong->Visible=false;
                    return true;
                }
                MessageBox::Show("Enter Only Numerical Values", "MOLE
                Advisor");
                return false;
            }catch(Exception^ ex){
                MessageBox::Show("Enter Only Numerical Values "+ex-
                >Message, "MOLE Advisor");
                return false;
            }
        }else{
            MessageBox::Show("Enter Values for All Required Fields", "MOLE
            Advisor");
        }
    }
}

```

```

        return false;
    }
}
double eq;
void calSn(){
    if(av==0){
        setMPLoc(sawrong);
        label3->Visible=false;
        setA_Sn();
        eq = (2*tsnv - (nv*dv*(nv-1)))/(2*nv);
        stl->Text = "a";
        snl->Text="a = ?      d = "+dv+"      n = "+nv+"      T"+nv+" = "
        "+tsnv;
        ss2->Text="2 x "+tsnv +" - [ "+nv+"( "+nv+"-1)"+ " "+dv+"]/2 x "
        "+nv;
        ss3->Text="( "+2*tsnv +" - "+nv*(nv-1)*dv+ " )/"+2*nv;
    }else if(dv == 0){
        setMPLoc(sdwrong);
        label3->Visible=false;
        setA_Sn();
        eq = 2*(tsnv-av*nv)/nv*(nv-1);
        stl->Text = "d";
        snl->Text="d = ?      a = "+av+"      n = "+nv+"      T"+nv+" = "
        "+tsnv;
        ss2->Text="2 x ( "+tsnv +" - "+av+"x"+nv+")/"+nv+"( "+nv+"-1)";
        ss3->Text=2*(tsnv-av*nv) +"/"+nv*(nv-1);
    }else if(nv == 0){
        label3->Visible=true;
        MessageBox::Show("This Type of Calculation is not Possible",
        "MOLE Advisor");
        showP(psn,"Sum of Terms");
    }else if(tsnv == 0){
        setMPLoc(snwrong);
        label3->Visible=true;
        set_Sn();
        eq = nv/2 *(2*av+(nv-1)*dv);
        snl->Text="S" +nv+" = ?      a = "+av+"      d = "+dv+"      n = "
        "+nv;
        ss2->Text=nv+ "/2" +"[ 2"+av+"( "+nv+"-1)"+dv;
        ss3->Text=nv/2 +" x "+(2*av +(nv-1)*dv);
        stl->Text = "S"+System::Convert::ToString(nv);
    }
}
void calTn(){
    if(av==0){
        setMPLoc(awrong);
        setA_Tn();
        eq = tsnv - (dv*(nv-1));
        tnl->Text = "a";
        s1->Text="a = ?      d = "+dv+"      n = "+nv+"      T"+nv+" = "
        "+tsnv;
        s2->Text=tsnv +" - [ ( "+nv+"-1)"+ " "+dv+"]";
        s3->Text=tsnv +" - "+(nv-1)*dv;
    }else if(dv == 0){
        setMPLoc(dwrong);
        setd_n();
        eq = (tsnv - av)/(nv-1);
        tnl->Text = "d";
    }
}

```

```

        s1->Text="d = ?      a = "+av+"      n = "+nv+"      T"+nv+" = "
    "+tsnv;
        s2->Text=tsnv + " - "+av+"/"+nv+"-1";
        s3->Text=tsnv-av +"/"+(nv-1);
    }else if(nv == 0){
        setMPLoc(nwrong);
        setd_n();
        eq = ((tsnv-av) + dv)/dv;
        tnl->Text = "n";
        s1->Text="n= ?      a = "+av+"      d = "+dv+"      Tn+"+ " = "+tsnv;
        s2->Text="("+tsnv + " - "+av+"/"+dv+")+1";
        s3->Text=(tsnv-av)/dv + " + 1";
    }else if(tsnv == 0){
        setMPLoc(tnwrong);
        setA_Tn();
        eq = av + (nv -1) *dv;
        s1->Text="T" +nv +" = ?      a = "+av+"      d = "+dv+"      n =
    "+nv;
        s2->Text=av + " + "+" ("+nv+"-1)+"+ " "+dv;
        s3->Text=av + " + "+(nv-1)*dv;
        tnl->Text = "T"+System::Convert::ToString(nv);
    }
}
void doCalculate(){
    if(tn->Checked){
        calTn();
        fa->Text = System::Convert::ToString(eq);
    }else{
        calSn();
        sfa->Text = System::Convert::ToString(eq);
    }
}
void setMPLoc(PictureBox^ p){
    p->Location=System::Drawing::Point(388,49);
    p->Size=System::Drawing::Size(235,211);
    p->Visible=true;
    p->BringToFront();
}
void set_Sn(){
    stl->Location=System::Drawing::Point(385,111);
    stl->BringToFront();
    ss2->Location=System::Drawing::Point(438,110);
    ss2->BringToFront();
    ss3->Location=System::Drawing::Point(438,162);
    ss3->BringToFront();
    sfa->Location=System::Drawing::Point(437,201);
    sfa->BringToFront();
}
void setA_Sn(){
    stl->Location=System::Drawing::Point(382,126);
    stl->BringToFront();
    ss2->Location=System::Drawing::Point(439,128);
    ss2->BringToFront();
    ss3->Location=System::Drawing::Point(439,174);
    ss3->BringToFront();
    sfa->Location=System::Drawing::Point(440, 215);
    sfa->BringToFront();
}

```

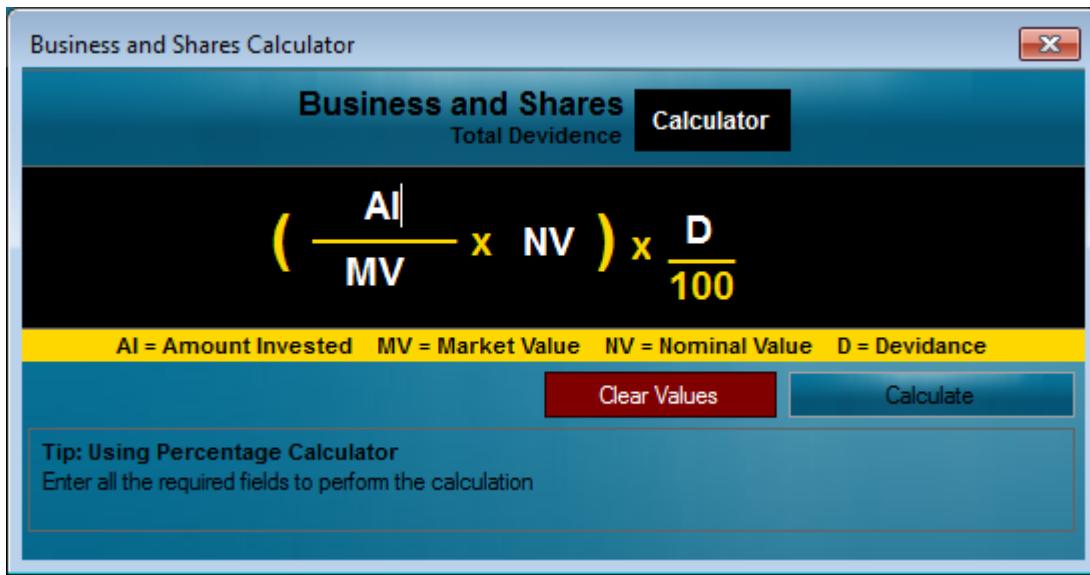
```

        }
        void setA_Tn(){
            tnl->Location=System::Drawing::Point(394, 97);
            tnl->BringToFront();
            s2->Location=System::Drawing::Point(451, 96);
            s2->BringToFront();
            s3->Location=System::Drawing::Point(456, 140);
            s3->BringToFront();
            fa->Location=System::Drawing::Point(454, 188);
            fa->BringToFront();
        }
        void setd_n(){
            tnl->Location=System::Drawing::Point(394, 124);
            tnl->BringToFront();
            s2->Location=System::Drawing::Point(451,125);
            s2->BringToFront();
            s3->Location=System::Drawing::Point(456,174);
            s3->BringToFront();
            fa->Location=System::Drawing::Point(453,218);
            fa->BringToFront();
        }
    private: System::Void calv_Click(System::Object^  sender, System::EventArgs^  e) {
        if(detValues(a,d,n,tnv)){
            ptn->Location = System::Drawing::Point(4,101);
            ptn->Size = System::Drawing::Size(626,267);
            doCalculate();
        }
    }
    private: System::Void tn_CheckedChanged(System::Object^  sender, System::EventArgs^  e) {
        psn->Visible=false;
        showP(ptn,"Number of Terms");
    }
    private: System::Void sn_CheckedChanged(System::Object^  sender, System::EventArgs^  e) {
        ptn->Visible=false;
        showP(psn,"Sum of Terms");
    }
    private: System::Void calSnV_Click(System::Object^  sender, System::EventArgs^  e) {
        if(detValues(sa,sd,ns,snv)){
            psn->Location = System::Drawing::Point(4,101);
            psn->Size = System::Drawing::Size(626,267);
            doCalculate();
        }
    }
    private: System::Void snn_TextChanged(System::Object^  sender, System::EventArgs^  e) {
        ns->Text=snn->Text;
        ns->Enabled=false;
    }
};

}

```

8. bis.cpp (Business and Shares)



```
#include "bis.h"
```

9. bis.h (Business and Shares)

```
#pragma once

namespace mCalculator {

    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 bis
    /// </summary>
    public ref class bis : public System::Windows::Forms::Form
    {
public:
    bis(void)
    {
        InitializeComponent();
        panel6->Location=System::Drawing::Point(3,180);
        this->Size=System::Drawing::Size(547, 284);
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    ~bis()
    {
```

```

        if (components)
    {
        delete components;
    }
}
internal: System::Windows::Forms::Panel^ panel3;
protected:

internal: System::Windows::Forms::Label^ label5;
internal: System::Windows::Forms::Label^ label19;
internal: System::Windows::Forms::Button^ button2;
internal: System::Windows::Forms::Button^ button3;
internal: System::Windows::Forms::Label^ label20;
internal: System::Windows::Forms::Panel^ panel7;
internal: System::Windows::Forms::TextBox^ ai;

internal: System::Windows::Forms::Label^ label26;
internal: System::Windows::Forms::Label^ label28;
internal: System::Windows::Forms::Label^ label27;
internal: System::Windows::Forms::TextBox^ nv;

internal: System::Windows::Forms::TextBox^ mv;

internal: System::Windows::Forms::Label^ label10;
internal: System::Windows::Forms::Label^ label24;
internal: System::Windows::Forms::Label^ caln;
internal: System::Windows::Forms::TextBox^ d;

internal: System::Windows::Forms::Label^ label1;
private: System::Windows::Forms::Panel^ showhow1;
internal:
internal: System::Windows::Forms::Label^ sfa;
private:
internal: System::Windows::Forms::Label^ ss3;
internal: System::Windows::Forms::Label^ tnl;
internal: System::Windows::Forms::Label^ ss2;
internal: System::Windows::Forms::Label^ label13;
internal: System::Windows::Forms::Label^ ss1;
internal: System::Windows::Forms::Label^ label15;
internal: System::Windows::Forms::Panel^ panel6;
internal: System::Windows::Forms::Label^ label17;
internal: System::Windows::Forms::Label^ label18;

private:
/// <summary>
/// Required designer variable.
/// </summary>
System::ComponentModel::Container ^components;

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

```

```

System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(bis::typeid));
    this->panel3 = (gcnew System::Windows::Forms::Panel());
    this->caln = (gcnew System::Windows::Forms::Label());
    this->label5 = (gcnew System::Windows::Forms::Label());
    this->label9 = (gcnew System::Windows::Forms::Label());
    this->button2 = (gcnew System::Windows::Forms::Button());
    this->button3 = (gcnew System::Windows::Forms::Button());
    this->label20 = (gcnew System::Windows::Forms::Label());
    this->panel7 = (gcnew System::Windows::Forms::Panel());
    this->d = (gcnew System::Windows::Forms::TextBox());
    this->label1 = (gcnew System::Windows::Forms::Label());
    this->ai = (gcnew System::Windows::Forms::TextBox());
    this->label26 = (gcnew System::Windows::Forms::Label());
    this->label28 = (gcnew System::Windows::Forms::Label());
    this->label27 = (gcnew System::Windows::Forms::Label());
    this->nv = (gcnew System::Windows::Forms::TextBox());
    this->mv = (gcnew System::Windows::Forms::TextBox());
    this->label10 = (gcnew System::Windows::Forms::Label());
    this->label24 = (gcnew System::Windows::Forms::Label());
    this->showhow1 = (gcnew System::Windows::Forms::Panel());
    this->sfa = (gcnew System::Windows::Forms::Label());
    this->ss3 = (gcnew System::Windows::Forms::Label());
    this->tnl = (gcnew System::Windows::Forms::Label());
    this->ss2 = (gcnew System::Windows::Forms::Label());
    this->label13 = (gcnew System::Windows::Forms::Label());
    this->ss1 = (gcnew System::Windows::Forms::Label());
    this->label15 = (gcnew System::Windows::Forms::Label());
    this->panel6 = (gcnew System::Windows::Forms::Panel());
    this->label17 = (gcnew System::Windows::Forms::Label());
    this->label18 = (gcnew System::Windows::Forms::Label());
    this->panel3->SuspendLayout();
    this->panel7->SuspendLayout();
    this->showhow1->SuspendLayout();
    this->panel6->SuspendLayout();
    this->SuspendLayout();
    //
    // panel3
    //
    this->panel3->BackColor = System::Drawing::Color::DodgerBlue;
    this->panel3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel3.BackgroundImage")));
    this->panel3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->panel3->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->panel3->Controls->Add(this->caln);
    this->panel3->Controls->Add(this->label5);
    this->panel3->Controls->Add(this->label19);
    this->panel3->Location = System::Drawing::Point(-2, 1);
    this->panel3->Name = L"panel3";
    this->panel3->Size = System::Drawing::Size(537, 49);
    this->panel3->TabIndex = 7;
    //
    // caln
    //
    this->caln->BackColor = System::Drawing::Color::Transparent;

```

```

        this->caln->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->caln->Location = System::Drawing::Point(118, 25);
        this->caln->Name = L"caln";
        this->caln->Size = System::Drawing::Size(187, 14);
        this->caln->TabIndex = 2;
        this->caln->Text = L"Total Devidence\r\n";
        this->caln-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
        //
// label5
//
this->label5->BackColor = System::Drawing::Color::Black;
this->label5->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
this->label5->ForeColor = System::Drawing::Color::White;
this->label5->Location = System::Drawing::Point(307, 9);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(78, 31);
this->label5->TabIndex = 0;
this->label5->Text = L"Calculator";
this->label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// label9
//
this->label9->AutoSize = true;
this->label9->BackColor = System::Drawing::Color::Transparent;
this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
this->label9->Location = System::Drawing::Point(135, 7);
this->label9->Name = L"label9";
this->label9->Size = System::Drawing::Size(172, 19);
this->label9->TabIndex = 1;
this->label9->Text = L"Business and Shares";
//
// button2
//
this->button2->BackColor = System::Drawing::Color::Maroon;
this->button2->Cursor = System::Windows::Forms::Cursors::Hand;
this->button2->FlatStyle = System::Windows::Forms::FlatStyle::PopUp;
this->button2->ForeColor = System::Drawing::Color::White;
this->button2->Location = System::Drawing::Point(261, 152);
this->button2->Name = L"button2";
this->button2->Size = System::Drawing::Size(116, 23);
this->button2->TabIndex = 43;
this->button2->Text = L"Clear Values";
this->button2->UseVisualStyleBackColor = false;
//
// button3
//
this->button3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"button3.BackgroundImage")));

```

```

    this->button3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->button3->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button3->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
    this->button3->ForeColor = System::Drawing::Color::Black;
    this->button3->Location = System::Drawing::Point(383, 152);
    this->button3->Name = L"button3";
    this->button3->Size = System::Drawing::Size(143, 23);
    this->button3->TabIndex = 42;
    this->button3->Text = L"Calculate";
    this->button3->UseVisualStyleBackColor = true;
    this->button3->Click += gcnew System::EventHandler(this,
&bis::button3_Click);
    //
    // label20
    //
    this->label20->BackColor = System::Drawing::Color::Gold;
    this->label20->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label20->ForeColor = System::Drawing::Color::Black;
    this->label20->Location = System::Drawing::Point(-5, 131);
    this->label20->Name = L"label20";
    this->label20->Size = System::Drawing::Size(540, 16);
    this->label20->TabIndex = 40;
    this->label20->Text = L"AI = Amount Invested      MV = Market Value
NV = Nominal Value
    D = Devidance";
    this->label20->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // panel7
    //
    this->panel7->BackColor = System::Drawing::Color::Black;
    this->panel7->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->panel7->Controls->Add(this->d);
    this->panel7->Controls->Add(this->label11);
    this->panel7->Controls->Add(this->ai);
    this->panel7->Controls->Add(this->label26);
    this->panel7->Controls->Add(this->label28);
    this->panel7->Controls->Add(this->label27);
    this->panel7->Controls->Add(this->nv);
    this->panel7->Controls->Add(this->mv);
    this->panel7->Controls->Add(this->label10);
    this->panel7->Controls->Add(this->label24);
    this->panel7->Location = System::Drawing::Point(-2, 49);
    this->panel7->Name = L"panel7";
    this->panel7->Size = System::Drawing::Size(537, 82);
    this->panel7->TabIndex = 41;
    //
    // d
    //
    this->d->BackColor = System::Drawing::Color::Black;
    this->d->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->d->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->d->ForeColor = System::Drawing::Color::White;

```

```

this->d->Location = System::Drawing::Point(315, 20);
this->d->MaxLength = 5;
this->d->Multiline = true;
this->d->Name = L"d";
this->d->Size = System::Drawing::Size(49, 26);
this->d->TabIndex = 54;
this->d->Text = L"D";
this->d-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// label1
//
this->label1->AutoSize = true;
this->label1->BackColor = System::Drawing::Color::Black;
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label1->ForeColor = System::Drawing::Color::Gold;
this->label1->Location = System::Drawing::Point(301, 28);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(21, 22);
this->label1->TabIndex = 53;
this->label1->Text = L"x";
//
// ai
//
this->ai->BackColor = System::Drawing::Color::Black;
this->ai->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->ai->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ai->ForeColor = System::Drawing::Color::White;
this->ai->Location = System::Drawing::Point(136, 8);
this->ai->MaxLength = 7;
this->ai->Multiline = true;
this->ai->Name = L"ai";
this->ai->Size = System::Drawing::Size(90, 23);
this->ai->TabIndex = 39;
this->ai->Text = L"AI";
this->ai-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// label26
//
this->label26->AutoSize = true;
this->label26->BackColor = System::Drawing::Color::Black;
this->label26->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label26->ForeColor = System::Drawing::Color::Gold;
this->label26->Location = System::Drawing::Point(118, 16);
this->label26->Name = L"label26";
this->label26->Size = System::Drawing::Size(28, 37);
this->label26->TabIndex = 40;
this->label26->Text = L"(";
//
// label28
//

```

```

        this->label28->AutoSize = true;
        this->label28->BackColor = System::Drawing::Color::Black;
        this->label28->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label28->ForeColor = System::Drawing::Color::Gold;
        this->label28->Location = System::Drawing::Point(280, 16);
        this->label28->Name = L"label28";
        this->label28->Size = System::Drawing::Size(28, 37);
        this->label28->TabIndex = 43;
        this->label28->Text = L")";
    //
    // label27
    //
    this->label27->AutoSize = true;
    this->label27->BackColor = System::Drawing::Color::Black;
    this->label27->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->label27->ForeColor = System::Drawing::Color::Gold;
    this->label27->Location = System::Drawing::Point(221, 26);
    this->label27->Name = L"label27";
    this->label27->Size = System::Drawing::Size(21, 22);
    this->label27->TabIndex = 38;
    this->label27->Text = L"x";
    //
    // nv
    //
    this->nv->BackColor = System::Drawing::Color::Black;
    this->nv->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->nv->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->nv->ForeColor = System::Drawing::Color::White;
    this->nv->Location = System::Drawing::Point(240, 26);
    this->nv->MaxLength = 5;
    this->nv->Multiline = true;
    this->nv->Name = L"nv";
    this->nv->Size = System::Drawing::Size(49, 26);
    this->nv->TabIndex = 52;
    this->nv->Text = L"NV";
    this->nv-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    //
    // mv
    //
    this->mv->BackColor = System::Drawing::Color::Black;
    this->mv->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->mv->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->mv->ForeColor = System::Drawing::Color::White;
    this->mv->Location = System::Drawing::Point(143, 41);
    this->mv->MaxLength = 5;
    this->mv->Multiline = true;
    this->mv->Name = L"mv";
    this->mv->Size = System::Drawing::Size(68, 26);
    this->mv->TabIndex = 47;

```

```

        this->mv->Text = L"MV";
        this->mv->TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    //
    // label10
    //
    this->label10->BackColor = System::Drawing::Color::Black;
    this->label10->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label10->ForeColor = System::Drawing::Color::Gold;
    this->label10->Location = System::Drawing::Point(137, 16);
    this->label10->Name = L"label10";
    this->label10->Size = System::Drawing::Size(96, 34);
    this->label10->TabIndex = 51;
    this->label10->Text = L"_____";
//
// label24
//
this->label24->BackColor = System::Drawing::Color::Black;
this->label24->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label24->ForeColor = System::Drawing::Color::Gold;
    this->label24->Location = System::Drawing::Point(315, 8);
    this->label24->Name = L"label24";
    this->label24->Size = System::Drawing::Size(54, 81);
    this->label24->TabIndex = 37;
    this->label24->Text = L"___\r\n100";
    this->label24-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// showhow1
//
this->showhow1->BackColor = System::Drawing::Color::Transparent;
this->showhow1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->showhow1->Controls->Add(this->sfa);
    this->showhow1->Controls->Add(this->ss3);
    this->showhow1->Controls->Add(this->tn1);
    this->showhow1->Controls->Add(this->ss2);
    this->showhow1->Controls->Add(this->label13);
    this->showhow1->Controls->Add(this->ss1);
    this->showhow1->Controls->Add(this->label15);
    this->showhow1->ForeColor = System::Drawing::Color::Black;
    this->showhow1->Location = System::Drawing::Point(5, 181);
    this->showhow1->Name = L"showhow1";
    this->showhow1->Size = System::Drawing::Size(521, 152);
    this->showhow1->TabIndex = 45;
    this->showhow1->Visible = false;
//
// sfa
//
this->sfa->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->sfa->Location = System::Drawing::Point(233, 116);
    this->sfa->Name = L"sfa";

```

```

        this->sfa->Size = System::Drawing::Size(233, 18);
        this->sfa->TabIndex = 30;
        this->sfa->Text = L"= 9999999999";
        //
        // ss3
        //
        this->ss3->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->ss3->Location = System::Drawing::Point(41, 105);
        this->ss3->Name = L"ss3";
        this->ss3->Size = System::Drawing::Size(186, 36);
        this->ss3->TabIndex = 29;
        this->ss3->Text = L"Total Devidence Paid";
        this->ss3-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
        //
        // tnl
        //
        this->tnl->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->tnl->Dock = System::Windows::Forms::DockStyle::Top;
        this->tnl->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->tnl->Location = System::Drawing::Point(0, 0);
        this->tnl->Name = L"tnl";
        this->tnl->Size = System::Drawing::Size(519, 21);
        this->tnl->TabIndex = 28;
        this->tnl->Text = L"LA = I = P =" ;
        this->tnl-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // ss2
        //
        this->ss2->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->ss2->Location = System::Drawing::Point(233, 72);
        this->ss2->Name = L"ss2";
        this->ss2->Size = System::Drawing::Size(154, 18);
        this->ss2->TabIndex = 27;
        this->ss2->Text = L"= 9999999999";
        //
        // label13
        //
        this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label13->Location = System::Drawing::Point(41, 70);
        this->label13->Name = L"label13";
        this->label13->Size = System::Drawing::Size(187, 15);
        this->label13->TabIndex = 26;
        this->label13->Text = L"Nominal Value of Shares";
        this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
        //
        // ss1

```

```

//
this->ss1->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ss1->Location = System::Drawing::Point(234, 31);
this->ss1->Name = L"ss1";
this->ss1->Size = System::Drawing::Size(174, 18);
this->ss1->TabIndex = 25;
this->ss1->Text = L"= (9999 - 9999) + 9999";
//
// label15
//
this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label15->Location = System::Drawing::Point(18, 31);
this->label15->Name = L"label15";
this->label15->Size = System::Drawing::Size(211, 18);
this->label15->TabIndex = 24;
this->label15->Text = L"No of Shares Bought";
this->label15-> TextAlign =
System::Drawing::ContentAlignment::TopRight;
//
// panel6
//
this->panel6->BackColor = System::Drawing::Color::Transparent;
this->panel6->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->panel6->Controls->Add(this->label17);
this->panel6->Controls->Add(this->label18);
this->panel6->ForeColor = System::Drawing::Color::Black;
this->panel6->Location = System::Drawing::Point(3, 339);
this->panel6->Name = L"panel6";
this->panel6->Size = System::Drawing::Size(523, 52);
this->panel6->TabIndex = 44;
//
// label17
//
this->label17->BackColor = System::Drawing::Color::Transparent;
this->label17->Location = System::Drawing::Point(3, 19);
this->label17->Name = L"label17";
this->label17->Size = System::Drawing::Size(527, 31);
this->label17->TabIndex = 32;
this->label17->Text = L"Enter all the required fields to perform the
calculation";
//
// label18
//
this->label18->BackColor = System::Drawing::Color::Transparent;
this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label18->Location = System::Drawing::Point(3, 4);
this->label18->Name = L"label18";
this->label18->Size = System::Drawing::Size(502, 15);
this->label18->TabIndex = 31;
this->label18->Text = L"Tip: Using Percentage Calculator\r\n";

```

```

        this->label18->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // bis
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->ClientSize = System::Drawing::Size(531, 397);
        this->Controls->Add(this->showhow1);
        this->Controls->Add(this->panel16);
        this->Controls->Add(this->button2);
        this->Controls->Add(this->button3);
        this->Controls->Add(this->label20);
        this->Controls->Add(this->panel17);
        this->Controls->Add(this->panel13);
        this->ForeColor = System::Drawing::Color::Black;
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"bis";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"Business and Shares Calculator";
        this->panel3->ResumeLayout(false);
        this->panel3->PerformLayout();
        this->panel7->ResumeLayout(false);
        this->panel7->PerformLayout();
        this->showhow1->ResumeLayout(false);
        this->panel6->ResumeLayout(false);
        this->ResumeLayout(false);

    }

#pragma endregion
Boolean detValues(TextBox^ a, TextBox^ b, TextBox^ c, TextBox^ d){
    if(a->Text != "" && b->Text != "" && c->Text != "" && d->Text != ""){
        try{
            setData(a->Text, b->Text, c->Text, d->Text);
            return true;
        }catch(Exception^ ex){
            MessageBox::Show("Enter Only Numerical Values "+ex-
>Message, "MOLE Advisor");
            return false;
        }
    }else{
        MessageBox::Show("Enter Values for All Required Fields", "MOLE
Advisor");
        return false;
    }
}
void setData(String^ x, String^ b, String^ c, String^ z){
    la =System::Convert::.ToDouble(x);
    ir = System::Convert::.ToDouble(b);

```

```

        pe=System::Convert::.ToDouble(c);
        dow=System::Convert::.ToDouble(z);
    }
    double la, ir, pe, dow ,tot;
private: System::Void button3_Click(System::Object^  sender, System::EventArgs^
e) {
    if(detValues(ai,mv,nv,d)){
        double tot = (la/ir) * pe*(dow/100);
        tnl->Text ="AI = "+la +" MV = "+ir+
NV = "+pe+"
        D = "+dow+"%";
        ss1->Text=" = " +System::Convert::ToString(la/ir);
        ss2->Text=" = " + System::Convert::ToString((la/ir) *
pe);
        sfa->Text = " = " + System::Convert::ToString(tot);
        showhow1->Visible=true;
        panel6->Location=System::Drawing::Point(3,339);
        this->Size=System::Drawing::Size(547, 436);
    }
}
};
}

```

10. gp.cpp (Geometric Progressions)

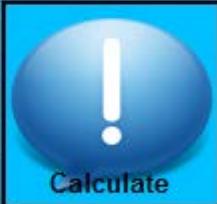
Geometric Progressions

$T_n = ar^{(n - 1)}$ $S_n = \frac{a(r^n - 1)}{r - 1}$ $b = /ac$

a(First Term)

n(Number of Terms)

r(Common Ratio)

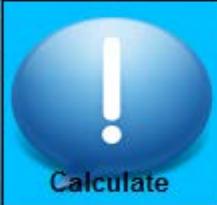
 Calculate

Geometric Progressions

$T_n = ar^{(n - 1)}$ $S_n = \frac{a(r^n - 1)}{r - 1}$ $b = /ac$

a(First Term)

c>Last Term)

 Calculate

```
#include "gpCal.h"
```

11. gp.h (Geometric Progressions)

```
#pragma once

namespace mCalculator {

    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 gpCal
    /// </summary>
    public ref class gpCal : public System::Windows::Forms::Form
    {
    public:
        gpCal(void)
        {
            InitializeComponent();
            //
            //TODO: Add the constructor code here
            showP(tnP);
            tn->Checked=true;
        }
        void showP(Panel^ p){
            p->Location = System::Drawing::Point(12,106);
            p->Size = System::Drawing::Size(478, 179);
            p->BringToFront();
            p->Visible=true;
        }
    protected:
        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        ~gpCal()
        {
            if (components)
            {
                delete components;
            }
        }

        double tv;
    private: System::Windows::Forms::PictureBox^ pictureBox2;
    protected:
    private: System::Windows::Forms::Label^ label1;
    private: System::Windows::Forms::Panel^ panel2;
    private: System::Windows::Forms::RadioButton^ tn;
    private: System::Windows::Forms::RadioButton^ sn;
    private: System::Windows::Forms::RadioButton^ mid;
    private: System::Windows::Forms::PictureBox^ pictureBox1;
    private: System::Windows::Forms::Panel^ tnp;
    private: System::Windows::Forms::Label^ anst;
```

```

private: System::Windows::Forms::Button^ button1;
private: System::Windows::Forms::Label^ label4;
private: System::Windows::Forms::Label^ label3;
private: System::Windows::Forms::Label^ label2;
private: System::Windows::Forms::TextBox^ td;
private: System::Windows::Forms::TextBox^ tnn;
private: System::Windows::Forms::TextBox^ ta;
private: System::Windows::Forms::Panel^ snP;
private: System::Windows::Forms::Label^ ansS;

private: System::Windows::Forms::Button^ button2;
private: System::Windows::Forms::Label^ label6;
private: System::Windows::Forms::Label^ label7;
private: System::Windows::Forms::Label^ label8;
private: System::Windows::Forms::TextBox^ sr;

private: System::Windows::Forms::TextBox^ snn;

private: System::Windows::Forms::TextBox^ sa;
private: System::Windows::Forms::Panel^ bnP;
private: System::Windows::Forms::Label^ ansB;

private: System::Windows::Forms::Button^ button3;
private: System::Windows::Forms::Label^ label9;

private: System::Windows::Forms::Label^ label11;
private: System::Windows::Forms::TextBox^ bc;

private: System::Windows::Forms::TextBox^ ba;

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
    System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(gpCal::typeid));
        this->pictureBox2 = (gcnew System::Windows::Forms::PictureBox());
        this->label1 = (gcnew System::Windows::Forms::Label());
        this->panel2 = (gcnew System::Windows::Forms::Panel());
        this->tn = (gcnew System::Windows::Forms::RadioButton());
        this->sn = (gcnew System::Windows::Forms::RadioButton());
        this->mid = (gcnew System::Windows::Forms::RadioButton());
        this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
        this->tnP = (gcnew System::Windows::Forms::Panel());
        this->ansT = (gcnew System::Windows::Forms::Label());
        this->button1 = (gcnew System::Windows::Forms::Button());

```

```

        this->label4 = (gcnew System::Windows::Forms::Label());
        this->label3 = (gcnew System::Windows::Forms::Label());
        this->label2 = (gcnew System::Windows::Forms::Label());
        this->td = (gcnew System::Windows::Forms::TextBox());
        this->ttn = (gcnew System::Windows::Forms::TextBox());
        this->ta = (gcnew System::Windows::Forms::TextBox());
        this->snP = (gcnew System::Windows::Forms::Panel());
        this->ansS = (gcnew System::Windows::Forms::Label());
        this->button2 = (gcnew System::Windows::Forms::Button());
        this->label6 = (gcnew System::Windows::Forms::Label());
        this->label7 = (gcnew System::Windows::Forms::Label());
        this->label8 = (gcnew System::Windows::Forms::Label());
        this->sr = (gcnew System::Windows::Forms::TextBox());
        this->snn = (gcnew System::Windows::Forms::TextBox());
        this->sa = (gcnew System::Windows::Forms::TextBox());
        this->bnP = (gcnew System::Windows::Forms::Panel());
        this->ansB = (gcnew System::Windows::Forms::Label());
        this->button3 = (gcnew System::Windows::Forms::Button());
        this->label9 = (gcnew System::Windows::Forms::Label());
        this->label11 = (gcnew System::Windows::Forms::Label());
        this->bc = (gcnew System::Windows::Forms::TextBox());
        this->ba = (gcnew System::Windows::Forms::TextBox());
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox2))->BeginInit();
        this->panel2->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox1))->BeginInit();
        this->tnP->SuspendLayout();
        this->snP->SuspendLayout();
        this->bnP->SuspendLayout();
        this->SuspendLayout();
        //
        // pictureBox2
        //
        this->pictureBox2->BackColor = System::Drawing::Color::DodgerBlue;
        this->pictureBox2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox2.BackgroundImage")));
        this->pictureBox2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->pictureBox2->Cursor = System::Windows::Forms::Cursors::Hand;
        this->pictureBox2->Location = System::Drawing::Point(455, 0);
        this->pictureBox2->Name = L"pictureBox2";
        this->pictureBox2->Size = System::Drawing::Size(31, 33);
        this->pictureBox2->TabIndex = 5;
        this->pictureBox2->TabStop = false;
        this->pictureBox2->Click += gcnew System::EventHandler(this,
&gpCal::pictureBox2_Click);
        //
        // label1
        //
        this->label1->BackColor = System::Drawing::Color::DodgerBlue;
        this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->label1->Location = System::Drawing::Point(13, -1);
        this->label1->Name = L"label1";
        this->label1->Size = System::Drawing::Size(476, 35);

```

```

        this->label1->TabIndex = 3;
        this->label1->Text = L"Geometric Progressions";
        this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// panel2
//
this->panel2->BackColor = System::Drawing::Color::Transparent;
this->panel2->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->panel2->Controls->Add(this->tn);
        this->panel2->Controls->Add(this->sn);
        this->panel2->Controls->Add(this->mid);
        this->panel2->Controls->Add(this->pictureBox1);
        this->panel2->Cursor = System::Windows::Forms::Cursors::Default;
        this->panel2->Location = System::Drawing::Point(13, 40);
        this->panel2->Name = L"panel2";
        this->panel2->Size = System::Drawing::Size(476, 51);
        this->panel2->TabIndex = 4;
        //
// tn
//
this->tn->AutoSize = true;
this->tn->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->tn->Location = System::Drawing::Point(17, 18);
this->tn->Name = L"tn";
this->tn->Size = System::Drawing::Size(13, 12);
this->tn->TabIndex = 3;
this->tn->TabStop = true;
this->tn->UseVisualStyleBackColor = true;
this->tn->CheckedChanged += gcnew System::EventHandler(this,
&gpCal::tn_CheckedChanged);
        //
// sn
//
this->sn->AutoSize = true;
this->sn->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->sn->Location = System::Drawing::Point(162, 18);
this->sn->Name = L"sn";
this->sn->Size = System::Drawing::Size(13, 12);
this->sn->TabIndex = 2;
this->sn->TabStop = true;
this->sn->UseVisualStyleBackColor = true;
this->sn->CheckedChanged += gcnew System::EventHandler(this,
&gpCal::sn_CheckedChanged);
        //
// mid
//
this->mid->AutoSize = true;
this->mid->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->mid->Location = System::Drawing::Point(355, 18);
this->mid->Name = L"mid";
this->mid->Size = System::Drawing::Size(13, 12);
this->mid->TabIndex = 1;
this->mid->TabStop = true;
this->mid->UseVisualStyleBackColor = true;
this->mid->CheckedChanged += gcnew System::EventHandler(this,
&gpCal::mid_CheckedChanged);

```

```

//
// pictureBox1
//
this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
this->pictureBox1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Zoom;
this->pictureBox1->Location = System::Drawing::Point(-144, 3);
this->pictureBox1->Name = L"pictureBox1";
this->pictureBox1->Size = System::Drawing::Size(606, 50);
this->pictureBox1->TabIndex = 0;
this->pictureBox1->TabStop = false;
//
// tnP
//
this->tnP->BackColor = System::Drawing::Color::Transparent;
this->tnP->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->tnP->Controls->Add(this->ansT);
this->tnP->Controls->Add(this->button1);
this->tnP->Controls->Add(this->label14);
this->tnP->Controls->Add(this->label13);
this->tnP->Controls->Add(this->label12);
this->tnP->Controls->Add(this->td);
this->tnP->Controls->Add(this->tnn);
this->tnP->Controls->Add(this->ta);
this->tnP->Location = System::Drawing::Point(455, 261);
this->tnP->Name = L"tnP";
this->tnP->Size = System::Drawing::Size(35, 24);
this->tnP->TabIndex = 6;
//
// ansT
//
this->ansT->BackColor = System::Drawing::Color::Gold;
this->ansT->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ansT->Location = System::Drawing::Point(56, 143);
this->ansT->Name = L"ansT";
this->ansT->Size = System::Drawing::Size(191, 19);
this->ansT->TabIndex = 9;
this->ansT->Text = L"Answer = ";
this->ansT-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
this->ansT->Visible = false;
//
// button1
//
this->button1->BackColor = System::Drawing::Color::DeepSkyBlue;
this->button1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"button1.BackgroundImage")));
this->button1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->button1->Cursor = System::Windows::Forms::.Cursors::Hand;
this->button1->FlatStyle = System::Windows::Forms::FlatStyle::Flat;

```

```

    this->button1->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->button1->Location = System::Drawing::Point(314, 26);
    this->button1->Name = L"button1";
    this->button1->Size = System::Drawing::Size(110, 104);
    this->button1->TabIndex = 6;
    this->button1->Text = L"Calculate";
    this->button1-> TextAlign =
System::Drawing::ContentAlignment::BottomCenter;
    this->button1->UseVisualStyleBackColor = false;
    this->button1->Click += gcnew System::EventHandler(this,
&gpCal::button1_Click);
    //
    // label4
    //
    this->label4->AutoSize = true;
    this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label4->Location = System::Drawing::Point(69, 110);
    this->label4->Name = L"label4";
    this->label4->Size = System::Drawing::Size(103, 15);
    this->label4->TabIndex = 5;
    this->label4->Text = L"r(Common Ratio)";
    //
    // label3
    //
    this->label3->AutoSize = true;
    this->label3->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label3->Location = System::Drawing::Point(56, 69);
    this->label3->Name = L"label3";
    this->label3->Size = System::Drawing::Size(120, 15);
    this->label3->TabIndex = 4;
    this->label3->Text = L"n(Number of Terms)";
    //
    // label2
    //
    this->label2->AutoSize = true;
    this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label2->Location = System::Drawing::Point(91, 32);
    this->label2->Name = L"label2";
    this->label2->Size = System::Drawing::Size(79, 15);
    this->label2->TabIndex = 3;
    this->label2->Text = L"a(First Term)";
    //
    // td
    //
    this->td->BackColor = System::Drawing::Color::CadetBlue;
    this->td->ForeColor = System::Drawing::Color::Black;
    this->td->Location = System::Drawing::Point(178, 107);
    this->td->Name = L"td";
    this->td->Size = System::Drawing::Size(130, 20);
    this->td->TabIndex = 2;

```

```

// tnn
//
this->tnn->BackColor = System::Drawing::Color::CadetBlue;
this->tnn->ForeColor = System::Drawing::Color::Black;
this->tnn->Location = System::Drawing::Point(178, 66);
this->tnn->Name = L"tnn";
this->tnn->Size = System::Drawing::Size(130, 20);
this->tnn->TabIndex = 1;
//
// ta
//
this->ta->BackColor = System::Drawing::Color::CadetBlue;
this->ta->ForeColor = System::Drawing::Color::Black;
this->ta->Location = System::Drawing::Point(178, 29);
this->ta->Name = L"ta";
this->ta->Size = System::Drawing::Size(130, 20);
this->ta->TabIndex = 0;
//
// snP
//
this->snP->BackColor = System::Drawing::Color::Transparent;
this->snP->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->snP->Controls->Add(this->ansS);
this->snP->Controls->Add(this->button2);
this->snP->Controls->Add(this->label6);
this->snP->Controls->Add(this->label7);
this->snP->Controls->Add(this->label8);
this->snP->Controls->Add(this->sr);
this->snP->Controls->Add(this->snn);
this->snP->Controls->Add(this->sa);
this->snP->Location = System::Drawing::Point(12, 261);
this->snP->Name = L"snP";
this->snP->Size = System::Drawing::Size(73, 24);
this->snP->TabIndex = 7;
//
// ansS
//
this->ansS->BackColor = System::Drawing::Color::Gold;
this->ansS->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ansS->Location = System::Drawing::Point(56, 143);
this->ansS->Name = L"ansS";
this->ansS->Size = System::Drawing::Size(191, 19);
this->ansS->TabIndex = 9;
this->ansS->Text = L"Answer = ";
this->ansS-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
this->ansS->Visible = false;
//
// button2
//
this->button2->BackColor = System::Drawing::Color::DeepSkyBlue;
this->button2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"button2.BackgroundImage")));

```

```

    this->button2->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->button2->Cursor = System::Windows::Forms::Cursors::Hand;
    this->button2->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->button2->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->button2->Location = System::Drawing::Point(314, 26);
    this->button2->Name = L"button2";
    this->button2->Size = System::Drawing::Size(110, 104);
    this->button2->TabIndex = 6;
    this->button2->Text = L"Calculate";
    this->button2-> TextAlign =
System::Drawing::ContentAlignment::BottomCenter;
    this->button2->UseVisualStyleBackColor = false;
    this->button2->Click += gcnew System::EventHandler(this,
&gpCal::button2_Click);
    //
    // label6
    //
    this->label6->AutoSize = true;
    this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label6->Location = System::Drawing::Point(69, 110);
    this->label6->Name = L"label6";
    this->label6->Size = System::Drawing::Size(103, 15);
    this->label6->TabIndex = 5;
    this->label6->Text = L"r(Common Ratio)";
    //
    // label7
    //
    this->label7->AutoSize = true;
    this->label7->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label7->Location = System::Drawing::Point(56, 69);
    this->label7->Name = L"label7";
    this->label7->Size = System::Drawing::Size(120, 15);
    this->label7->TabIndex = 4;
    this->label7->Text = L"n(Number of Terms)";
    //
    // label8
    //
    this->label8->AutoSize = true;
    this->label8->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label8->Location = System::Drawing::Point(91, 32);
    this->label8->Name = L"label8";
    this->label8->Size = System::Drawing::Size(79, 15);
    this->label8->TabIndex = 3;
    this->label8->Text = L"a(First Term)";
    //
    // sr
    //
    this->sr->BackColor = System::Drawing::Color::CadetBlue;
    this->sr->ForeColor = System::Drawing::Color::Black;

```

```

this->sr->Location = System::Drawing::Point(178, 107);
this->sr->Name = L"sr";
this->sr->Size = System::Drawing::Size(130, 20);
this->sr->TabIndex = 2;
//
// snn
//
this->snn->BackColor = System::Drawing::Color::CadetBlue;
this->snn->ForeColor = System::Drawing::Color::Black;
this->snn->Location = System::Drawing::Point(178, 66);
this->snn->Name = L"snn";
this->snn->Size = System::Drawing::Size(130, 20);
this->snn->TabIndex = 1;
//
// sa
//
this->sa->BackColor = System::Drawing::Color::CadetBlue;
this->sa->ForeColor = System::Drawing::Color::Black;
this->sa->Location = System::Drawing::Point(178, 29);
this->sa->Name = L"sa";
this->sa->Size = System::Drawing::Size(130, 20);
this->sa->TabIndex = 0;
//
// bnP
//
this->bnP->BackColor = System::Drawing::Color::Transparent;
this->bnP->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->bnP->Controls->Add(this->ansB);
this->bnP->Controls->Add(this->button3);
this->bnP->Controls->Add(this->label19);
this->bnP->Controls->Add(this->label11);
this->bnP->Controls->Add(this->bc);
this->bnP->Controls->Add(this->ba);
this->bnP->Location = System::Drawing::Point(12, 106);
this->bnP->Name = L"bnP";
this->bnP->Size = System::Drawing::Size(478, 179);
this->bnP->TabIndex = 8;
//
// ansB
//
this->ansB->BackColor = System::Drawing::Color::Gold;
this->ansB->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ansB->Location = System::Drawing::Point(97, 108);
this->ansB->Name = L"ansB";
this->ansB->Size = System::Drawing::Size(191, 19);
this->ansB->TabIndex = 9;
this->ansB->Text = L"Answer = ";
this->ansB-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
this->ansB->Visible = false;
//
// button3
//
this->button3->BackColor = System::Drawing::Color::DeepSkyBlue;

```

```

        this->button3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"button3.BackgroundImage")));
        this->button3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->button3->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button3->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->button3->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->button3->Location = System::Drawing::Point(314, 26);
        this->button3->Name = L"button3";
        this->button3->Size = System::Drawing::Size(110, 104);
        this->button3->TabIndex = 6;
        this->button3->Text = L"Calculate";
        this->button3-> TextAlign =
System::Drawing::ContentAlignment::BottomCenter;
        this->button3->UseVisualStyleBackColor = false;
        this->button3->Click += gcnew System::EventHandler(this,
&gpCal::button3_Click);
        //
        // label9
        //
        this->label9->AutoSize = true;
        this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label9->Location = System::Drawing::Point(97, 68);
        this->label9->Name = L"label9";
        this->label9->Size = System::Drawing::Size(79, 15);
        this->label9->TabIndex = 5;
        this->label9->Text = L"c(Last Term)";
        //
        // label11
        //
        this->label11->AutoSize = true;
        this->label11->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label11->Location = System::Drawing::Point(97, 31);
        this->label11->Name = L"label11";
        this->label11->Size = System::Drawing::Size(79, 15);
        this->label11->TabIndex = 3;
        this->label11->Text = L"a(First Term)";
        //
        // bc
        //
        this->bc->BackColor = System::Drawing::Color::CadetBlue;
        this->bc->ForeColor = System::Drawing::Color::Black;
        this->bc->Location = System::Drawing::Point(178, 66);
        this->bc->Name = L"bc";
        this->bc->Size = System::Drawing::Size(130, 20);
        this->bc->TabIndex = 1;
        //
        // ba
        //
        this->ba->BackColor = System::Drawing::Color::CadetBlue;
        this->ba->ForeColor = System::Drawing::Color::Black;

```

```

        this->ba->Location = System::Drawing::Point(178, 29);
        this->ba->Name = L"ba";
        this->ba->Size = System::Drawing::Size(130, 20);
        this->ba->TabIndex = 0;
        //
        // gpCal
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->ClientSize = System::Drawing::Size(502, 303);
        this->Controls->Add(this->bnP);
        this->Controls->Add(this->snP);
        this->Controls->Add(this->tnP);
        this->Controls->Add(this->pictureBox2);
        this->Controls->Add(this->label1);
        this->Controls->Add(this->panel2);
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::None;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"gpCal";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"gpCal";
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox2))->EndInit();
        this->panel2->ResumeLayout(false);
        this->panel2->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox1))->EndInit();
        this->tnP->ResumeLayout(false);
        this->tnP->PerformLayout();
        this->snP->ResumeLayout(false);
        this->snP->PerformLayout();
        this->bnP->ResumeLayout(false);
        this->bnP->PerformLayout();
        this->ResumeLayout(false);

    }

#pragma endregion
    private: System::Void button1_Click(System::Object^ sender, System::EventArgs^
e) {
        if(ta->Text=="" || td->Text=="" || tnn->Text==""){
            MessageBox::Show("Enter All Required Values");
        }
        else{
            double a = System::Convert::.ToDouble(ta->Text);
            double r = System::Convert::.ToDouble(td->Text);
            double n = System::Convert::.ToDouble(tnn->Text);
            tv = Math::Pow(r,n) * a;
            ansT->Text = "Answer T"+n+ " =
"+System::Convert::ToString(tv/r);
            ansT->Visible=true;
        }
    }
}

```

```

        }
    }

private: System::Void button2_Click(System::Object^ sender, System::EventArgs^ e) {
    if(sa->Text=="" || sr->Text=="" || snn->Text==""){
        MessageBox::Show("Enter All Required Values");
    }
    else{
        double a = System::Convert::.ToDouble(sa->Text);
        double r = System::Convert::.ToDouble(sr->Text);
        double n = System::Convert::.ToDouble(snn->Text);
        if(r<1){
            tv = (a*(1-Math::Pow(r,n)))/1-r;
        }
        else{
            tv = (a*(Math::Pow(r,n) - 1))/r -1;
        }
        ansS->Text = "Answer S"+n+ " =
"+System::Convert::ToString(tv/r);
        ansS->Visible=true;
    }
}

private: System::Void tn_CheckedChanged(System::Object^ sender, System::EventArgs^ e) {
    showP(tnP);
}

private: System::Void sn_CheckedChanged(System::Object^ sender, System::EventArgs^ e) {
    showP(snP);
}

private: System::Void pictureBox2_Click(System::Object^ sender, System::EventArgs^ e) {
    this->Hide();
}

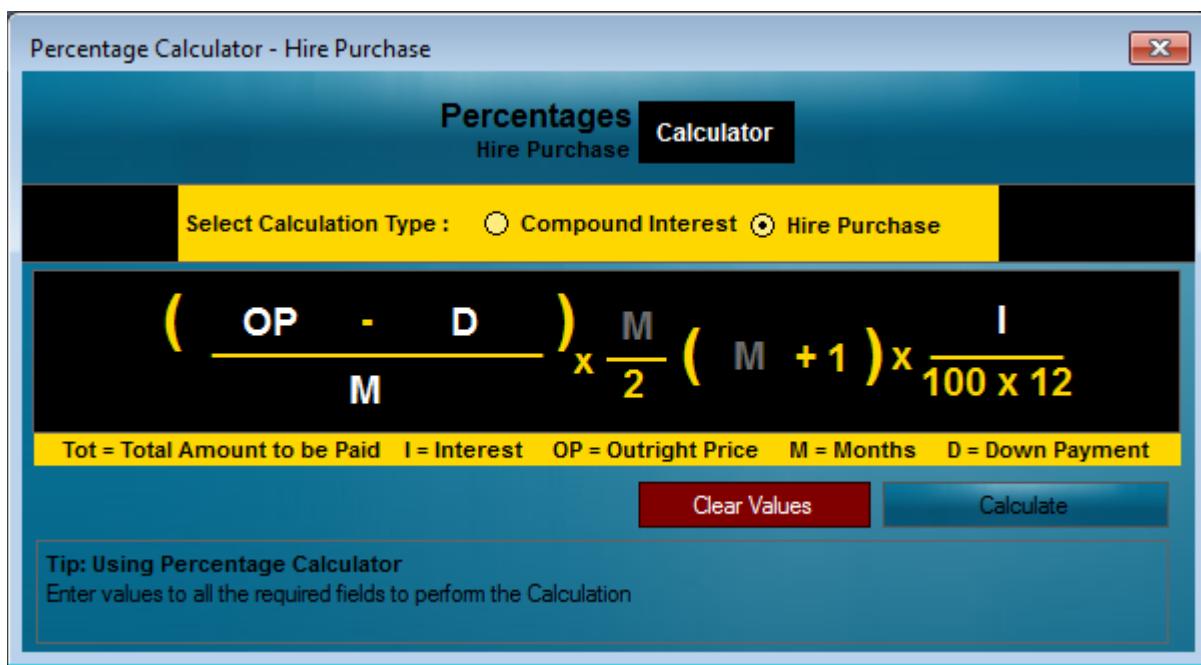
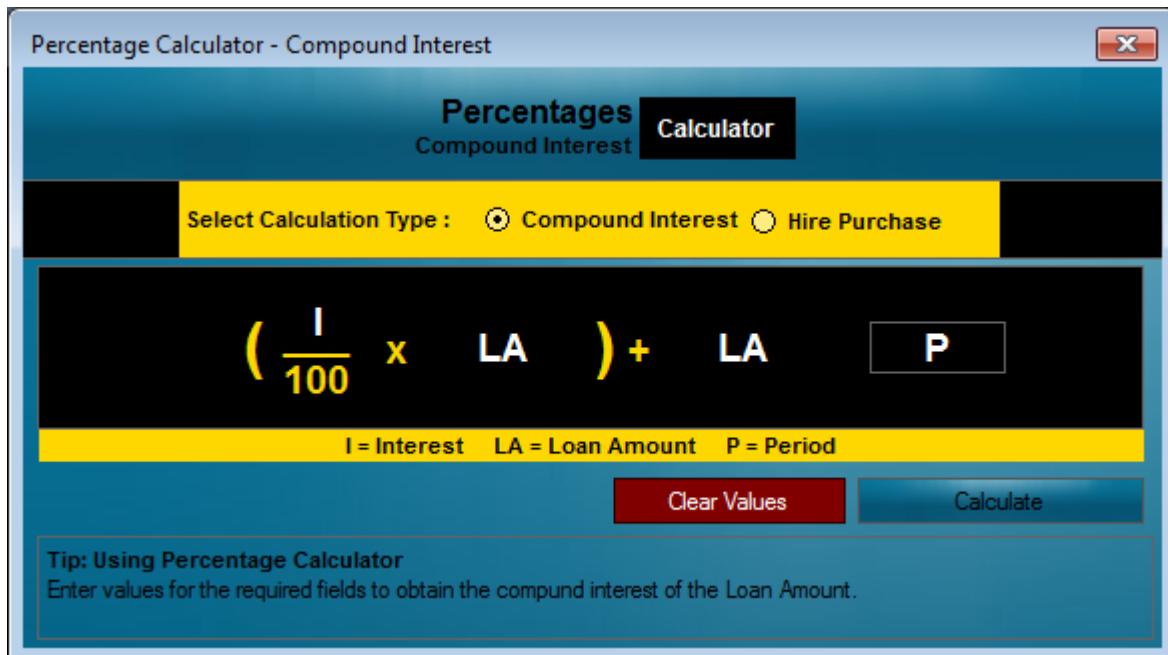
private: System::Void mid_CheckedChanged(System::Object^ sender, System::EventArgs^ e)
{
    showP(bnP);
}

private: System::Void button3_Click(System::Object^ sender, System::EventArgs^ e) {
    if(ba->Text=="" || bc->Text==""){
        MessageBox::Show("Enter All Required Values");
    }
    else{
        double a = System::Convert::.ToDouble(ba->Text);
        double r = System::Convert::.ToDouble(bc->Text);
        tv = Math::Sqrt((a*r));
        ansB->Text = "Answer c =
"+System::Convert::ToString(tv/r);
        ansB->Visible=true;
    }
}
};

}

```

12. percen.cpp (Percentages)



```
#include "percen.h"
```

13. percen.h (Percentags)

```
#pragma once

namespace mCalculator {

    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 percen
    /// </summary>
    public ref class percen : public System::Windows::Forms::Form
    {
public:
    percen(void)
    {
        InitializeComponent();
        //
        //TODO: Add the constructor code here
        //
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    ~percen()
    {
        if (components)
        {
            delete components;
        }
    }
internal: System::Windows::Forms::Panel^ panel3;
protected:
internal: System::Windows::Forms::Label^ caln;
internal: System::Windows::Forms::Label^ label5;
internal: System::Windows::Forms::Label^ label9;

private: System::Windows::Forms::ToolTip^ ttip;
internal: System::Windows::Forms::Panel^ ps;
internal: System::Windows::Forms::RadioButton^ hp;
private:

internal: System::Windows::Forms::Label^ label1;

private: System::Windows::Forms::Panel^ compund;
internal:

internal: System::Windows::Forms::Button^ button1;
private:
```

```
internal: System::Windows::Forms::Button^  calSnV;
internal: System::Windows::Forms::Label^  label3;
internal: System::Windows::Forms::Panel^  panel5;
internal: System::Windows::Forms::TextBox^  p;

internal: System::Windows::Forms::Label^  label2;
internal: System::Windows::Forms::TextBox^  i;

internal: System::Windows::Forms::Label^  label25;
internal: System::Windows::Forms::Label^  label19;
internal: System::Windows::Forms::TextBox^  l;

internal: System::Windows::Forms::Label^  label23;

internal: System::Windows::Forms::Label^  label16;

private: System::Windows::Forms::Panel^  showHow;
internal:
internal: System::Windows::Forms::Panel^  panel2;
private:
internal: System::Windows::Forms::Label^  label21;
internal: System::Windows::Forms::Label^  label4;
internal: System::Windows::Forms::RadioButton^  tn;
internal: System::Windows::Forms::Label^  s2;

internal: System::Windows::Forms::Label^  labelL;

internal: System::Windows::Forms::Label^  s1;
internal: System::Windows::Forms::Label^  sym;
internal: System::Windows::Forms::TextBox^  la1;
internal: System::Windows::Forms::Label^  snl;
internal: System::Windows::Forms::Label^  label8;
internal: System::Windows::Forms::Label^  fa;
internal: System::Windows::Forms::Label^  s3;
internal: System::Windows::Forms::Panel^  panel7;
internal: System::Windows::Forms::TextBox^  i1;

internal: System::Windows::Forms::Label^  label30;
internal: System::Windows::Forms::Label^  label26;
internal: System::Windows::Forms::Label^  label28;
internal: System::Windows::Forms::Label^  label29;
internal: System::Windows::Forms::Label^  label14;
internal: System::Windows::Forms::Label^  label12;
internal: System::Windows::Forms::TextBox^  m2;

internal: System::Windows::Forms::Label^  label11;
internal: System::Windows::Forms::Label^  label27;
internal: System::Windows::Forms::TextBox^  m1;

internal: System::Windows::Forms::TextBox^  d;
internal: System::Windows::Forms::TextBox^  m;
```

```

internal: System::Windows::Forms::Label^  label22;
internal: System::Windows::Forms::TextBox^  op;

internal: System::Windows::Forms::Label^  label10;
internal: System::Windows::Forms::Label^  label24;
internal: System::Windows::Forms::Label^  label20;
internal: System::Windows::Forms::Button^  button3;
internal: System::Windows::Forms::Panel^  panel6;
internal: System::Windows::Forms::Label^  label17;
internal: System::Windows::Forms::Label^  label18;
internal: System::Windows::Forms::Button^  button2;
private: System::Windows::Forms::Panel^  showhow1;
internal:

private:
internal: System::Windows::Forms::Label^  sfa;
internal: System::Windows::Forms::Label^  ss3;
internal: System::Windows::Forms::Label^  tnl;
internal: System::Windows::Forms::Label^  ss2;
internal: System::Windows::Forms::Label^  label13;
internal: System::Windows::Forms::Label^  ss1;
internal: System::Windows::Forms::Label^  label15;
private: System::Windows::Forms::Panel^  hirep;
internal:

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

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^  resources =
(gcnew System::ComponentModel::ComponentResourceManager(percen::typeid));
        this->panel3 = (gcnew System::Windows::Forms::Panel());
        this->caln = (gcnew System::Windows::Forms::Label());

```

```

this->label5 = (gcnew System::Windows::Forms::Label());
this->label9 = (gcnew System::Windows::Forms::Label());
this->ttip = (gcnew System::Windows::Forms::ToolTip(this-
>components));

this->hp = (gcnew System::Windows::Forms::RadioButton());
this->tn = (gcnew System::Windows::Forms::RadioButton());
this->ps = (gcnew System::Windows::Forms::Panel());
this->label1 = (gcnew System::Windows::Forms::Label());
this->compund = (gcnew System::Windows::Forms::Panel());
this->showHow = (gcnew System::Windows::Forms::Panel());
this->label8 = (gcnew System::Windows::Forms::Label());
this->fa = (gcnew System::Windows::Forms::Label());
this->s3 = (gcnew System::Windows::Forms::Label());
this->snl = (gcnew System::Windows::Forms::Label());
this->s2 = (gcnew System::Windows::Forms::Label());
this->label11 = (gcnew System::Windows::Forms::Label());
this->s1 = (gcnew System::Windows::Forms::Label());
this->sym = (gcnew System::Windows::Forms::Label());
this->button1 = (gcnew System::Windows::Forms::Button());
this->panel2 = (gcnew System::Windows::Forms::Panel());
this->label21 = (gcnew System::Windows::Forms::Label());
this->label4 = (gcnew System::Windows::Forms::Label());
this->calSnV = (gcnew System::Windows::Forms::Button());
this->label3 = (gcnew System::Windows::Forms::Label());
this->panel5 = (gcnew System::Windows::Forms::Panel());
this->lal1 = (gcnew System::Windows::Forms::TextBox());
this->p = (gcnew System::Windows::Forms::TextBox());
this->label2 = (gcnew System::Windows::Forms::Label());
this->i = (gcnew System::Windows::Forms::TextBox());
this->label25 = (gcnew System::Windows::Forms::Label());
this->label19 = (gcnew System::Windows::Forms::Label());
this->l1 = (gcnew System::Windows::Forms::TextBox());
this->label23 = (gcnew System::Windows::Forms::Label());
this->label16 = (gcnew System::Windows::Forms::Label());
this->panel7 = (gcnew System::Windows::Forms::Panel());
this->op = (gcnew System::Windows::Forms::TextBox());
this->i1 = (gcnew System::Windows::Forms::TextBox());
this->label30 = (gcnew System::Windows::Forms::Label());
this->label26 = (gcnew System::Windows::Forms::Label());
this->label28 = (gcnew System::Windows::Forms::Label());
this->label29 = (gcnew System::Windows::Forms::Label());
this->label14 = (gcnew System::Windows::Forms::Label());
this->label12 = (gcnew System::Windows::Forms::Label());
this->m2 = (gcnew System::Windows::Forms::TextBox());
this->label11 = (gcnew System::Windows::Forms::Label());
this->label27 = (gcnew System::Windows::Forms::Label());
this->m1 = (gcnew System::Windows::Forms::TextBox());
this->d = (gcnew System::Windows::Forms::TextBox());
this->m = (gcnew System::Windows::Forms::TextBox());
this->label22 = (gcnew System::Windows::Forms::Label());
this->label10 = (gcnew System::Windows::Forms::Label());
this->label24 = (gcnew System::Windows::Forms::Label());
this->label20 = (gcnew System::Windows::Forms::Label());
this->button3 = (gcnew System::Windows::Forms::Button());
this->panel6 = (gcnew System::Windows::Forms::Panel());
this->label17 = (gcnew System::Windows::Forms::Label());
this->label18 = (gcnew System::Windows::Forms::Label());
this->button2 = (gcnew System::Windows::Forms::Button());

```

```

this->showhow1 = (gcnew System::Windows::Forms::Panel());
this->sfa = (gcnew System::Windows::Forms::Label());
this->ss3 = (gcnew System::Windows::Forms::Label());
this->tnl = (gcnew System::Windows::Forms::Label());
this->ss2 = (gcnew System::Windows::Forms::Label());
this->label13 = (gcnew System::Windows::Forms::Label());
this->ss1 = (gcnew System::Windows::Forms::Label());
this->label15 = (gcnew System::Windows::Forms::Label());
this->hirep = (gcnew System::Windows::Forms::Panel());
this->panel3->SuspendLayout();
this->ps->SuspendLayout();
this->compund->SuspendLayout();
this->showHow->SuspendLayout();
this->panel2->SuspendLayout();
this->panel5->SuspendLayout();
this->panel7->SuspendLayout();
this->panel6->SuspendLayout();
this->showhow1->SuspendLayout();
this->hirep->SuspendLayout();
this->SuspendLayout();
//
// panel3
//
this->panel3->BackColor = System::Drawing::Color::DodgerBlue;
this->panel3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel3.BackgroundImage")));
this->panel3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->panel3->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->panel3->Controls->Add(this->caln);
this->panel3->Controls->Add(this->label15);
this->panel3->Controls->Add(this->label19);
this->panel3->Location = System::Drawing::Point(-28, -1);
this->panel3->Name = L"panel3";
this->panel3->Size = System::Drawing::Size(627, 58);
this->panel3->TabIndex = 6;
//
// caln
//
this->caln->BackColor = System::Drawing::Color::Transparent;
this->caln->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->caln->Location = System::Drawing::Point(148, 32);
this->caln->Name = L"caln";
this->caln->Size = System::Drawing::Size(187, 14);
this->caln->TabIndex = 2;
this->caln->Text = L"Hire Purchase";
this->caln-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
//
// label5
//
this->label5->BackColor = System::Drawing::Color::Black;
this->label5->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,

```

```

        static_cast<System::Byte>(0)));
this->label5->ForeColor = System::Drawing::Color::White;
this->label5->Location = System::Drawing::Point(335, 15);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(78, 31);
this->label5->TabIndex = 0;
this->label5->Text = L"Calculator";
this->label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
// 
// label9
// 
this->label9->AutoSize = true;
this->label9->BackColor = System::Drawing::Color::Transparent;
this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label9->Location = System::Drawing::Point(232, 13);
this->label9->Name = L"label9";
this->label9->Size = System::Drawing::Size(105, 19);
this->label9->TabIndex = 1;
this->label9->Text = L"Percentages";
// 
// ttip
// 
this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
this->ttip->ForeColor = System::Drawing::Color::White;
this->ttip->IsBalloon = true;
this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
this->ttip->ToolTipTitle = L"MOLE Advisor";
// 
// hp
// 
this->hp->AutoSize = true;
this->hp->BackColor = System::Drawing::Color::Gold;
this->hp->Cursor = System::Windows::Forms::.Cursors::Hand;
this->hp->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->hp->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->hp->ForeColor = System::Drawing::Color::Black;
this->hp->Location = System::Drawing::Point(364, 11);
this->hp->Name = L"hp";
this->hp->Size = System::Drawing::Size(101, 18);
this->hp->TabIndex = 34;
this->hp->TabStop = true;
this->hp->Text = L"Hire Purchase";
this->hp->TextImageRelation =
System::Windows::Forms::TextImageRelation::TextAboveImage;
this->ttip->SetToolTip(this->hp, L"Hire Purchase");
this->hp->UseVisualStyleBackColor = false;
this->hp->CheckedChanged += gcnew System::EventHandler(this,
&percen::hp_CheckedChanged);
// 
// tn
// 
this->tn->AutoSize = true;
this->tn->BackColor = System::Drawing::Color::Gold;

```

```

        this->tn->Cursor = System::Windows::Forms::Cursors::Hand;
        this->tn->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->tn->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->tn->ForeColor = System::Drawing::Color::Black;
        this->tn->Location = System::Drawing::Point(231, 10);
        this->tn->Name = L"tn";
        this->tn->Size = System::Drawing::Size(132, 18);
        this->tn->TabIndex = 35;
        this->tn->TabStop = true;
        this->tn->Text = L"Compound Interest";
        this->tn->TextImageRelation =
System::Windows::Forms::TextImageRelation::TextAboveImage;
        this->ttip->SetToolTip(this->tn, L"Compound Interest");
        this->tn->UseVisualStyleBackColor = false;
        this->tn->CheckedChanged += gcnew System::EventHandler(this,
&percen::tn_CheckedChanged);
        //
        // ps
        //
        this->ps->BackColor = System::Drawing::Color::Black;
        this->ps->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->ps->Controls->Add(this->tn);
        this->ps->Controls->Add(this->hp);
        this->ps->Controls->Add(this->label1);
        this->ps->Location = System::Drawing::Point(-1, 56);
        this->ps->Name = L"ps";
        this->ps->Size = System::Drawing::Size(596, 40);
        this->ps->TabIndex = 32;
        //
        // label1
        //
        this->label1->BackColor = System::Drawing::Color::Gold;
        this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label1->ForeColor = System::Drawing::Color::Black;
        this->label1->Location = System::Drawing::Point(78, 0);
        this->label1->Name = L"label1";
        this->label1->Size = System::Drawing::Size(410, 38);
        this->label1->TabIndex = 33;
        this->label1->Text = L"Select Calculation Type :";
        this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // compund
        //
        this->compund->BackColor = System::Drawing::Color::Transparent;
        this->compund->Controls->Add(this->showHow);
        this->compund->Controls->Add(this->button1);
        this->compund->Controls->Add(this->panel12);
        this->compund->Controls->Add(this->calSnV);
        this->compund->Controls->Add(this->label3);
        this->compund->Controls->Add(this->panel5);
        this->compund->Location = System::Drawing::Point(4, 367);
        this->compund->Name = L"compund";

```

```

this->compund->Size = System::Drawing::Size(81, 80);
this->compund->TabIndex = 35;
this->compund->Visible = false;
//
// showHow
//
this->showHow->BackColor = System::Drawing::Color::Transparent;
this->showHow->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->showHow->Controls->Add(this->label8);
this->showHow->Controls->Add(this->fa);
this->showHow->Controls->Add(this->s3);
this->showHow->Controls->Add(this->snl);
this->showHow->Controls->Add(this->s2);
this->showHow->Controls->Add(this->labelL);
this->showHow->Controls->Add(this->s1);
this->showHow->Controls->Add(this->sym);
this->showHow->ForeColor = System::Drawing::Color::Black;
this->showHow->Location = System::Drawing::Point(4, 138);
this->showHow->Name = L"showHow";
this->showHow->Size = System::Drawing::Size(553, 152);
this->showHow->TabIndex = 40;
this->showHow->Visible = false;
//
// label8
//
this->label8->BackColor = System::Drawing::Color::Transparent;
this->label8->Location = System::Drawing::Point(48, 90);
this->label8->Name = L"label8";
this->label8->Size = System::Drawing::Size(283, 14);
this->label8->TabIndex = 33;
this->label8->Text = L"Similarly Calculate the Interest for the Rest
of the Period";
//
// fa
//
this->fa->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->fa->Location = System::Drawing::Point(212, 116);
this->fa->Name = L"fa";
this->fa->Size = System::Drawing::Size(143, 18);
this->fa->TabIndex = 30;
this->fa->Text = L"= 9999999999";
//
// s3
//
this->s3->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->s3->Location = System::Drawing::Point(49, 105);
this->s3->Name = L"s3";
this->s3->Size = System::Drawing::Size(187, 36);
this->s3->TabIndex = 29;
this->s3->Text = L"Amount to be Paid at the\r\nEnd of First Year ";
this->s3-> TextAlign = System::Drawing::ContentAlignment::MiddleLeft;
//
// snl

```

```

//  

this->snl->BorderStyle =  

System::Windows::Forms::BorderStyle::FixedSingle;  

this->snl->Dock = System::Windows::Forms::DockStyle::Top;  

this->snl->Font = (gcnew System::Drawing::Font(L"Arial", 11,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->snl->Location = System::Drawing::Point(0, 0);  

this->snl->Name = L"snl";  

this->snl->Size = System::Drawing::Size(551, 21);  

this->snl->TabIndex = 28;  

this->snl->Text = L"LA =           I =           P =";  

this->snl-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

//  

// s2  

//  

this->s2->Font = (gcnew System::Drawing::Font(L"Arial", 11,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->s2->Location = System::Drawing::Point(212, 66);  

this->s2->Name = L"s2";  

this->s2->Size = System::Drawing::Size(143, 18);  

this->s2->TabIndex = 27;  

this->s2->Text = L"= 9999999999";  

//  

// labell  

//  

this->labell->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->labell->Location = System::Drawing::Point(48, 51);  

this->labell->Name = L"labell";  

this->labell->Size = System::Drawing::Size(187, 36);  

this->labell->TabIndex = 26;  

this->labell->Text = L"Amount to be Paid at the\r\nEnd of First Year  
";  

this->labell-> TextAlign =  

System::Drawing::ContentAlignment::MiddleLeft;  

//  

// s1  

//  

this->s1->Font = (gcnew System::Drawing::Font(L"Arial", 11,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->s1->Location = System::Drawing::Point(213, 31);  

this->s1->Name = L"s1";  

this->s1->Size = System::Drawing::Size(174, 18);  

this->s1->TabIndex = 25;  

this->s1->Text = L"= (9999 - 9999) + 9999";  

//  

// sym  

//  

this->sym->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->sym->Location = System::Drawing::Point(1, 31);  

this->sym->Name = L"sym";

```

```

this->sym->Size = System::Drawing::Size(211, 18);
this->sym->TabIndex = 24;
this->sym->Text = L"Interest for the First Year";
this->sym->TextAlign = System::Drawing::ContentAlignment::TopRight;
//
// button1
//
this->button1->BackColor = System::Drawing::Color::Maroon;
this->button1->Cursor = System::Windows::Forms::Cursors::Hand;
this->button1->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
this->button1->ForeColor = System::Drawing::Color::White;
this->button1->Location = System::Drawing::Point(291, 107);
this->button1->Name = L"button1";
this->button1->Size = System::Drawing::Size(116, 23);
this->button1->TabIndex = 39;
this->button1->Text = L"Clear Values";
this->button1->UseVisualStyleBackColor = false;
//
// panel2
//
this->panel2->BackColor = System::Drawing::Color::Transparent;
this->panel2->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->panel2->Controls->Add(this->label21);
this->panel2->Controls->Add(this->label14);
this->panel2->ForeColor = System::Drawing::Color::Black;
this->panel2->Location = System::Drawing::Point(3, 296);
this->panel2->Name = L"panel2";
this->panel2->Size = System::Drawing::Size(558, 52);
this->panel2->TabIndex = 37;
//
// label21
//
this->label21->BackColor = System::Drawing::Color::Transparent;
this->label21->Location = System::Drawing::Point(1, 19);
this->label21->Name = L"label21";
this->label21->Size = System::Drawing::Size(552, 30);
this->label21->TabIndex = 32;
this->label21->Text = L"Enter values for the required fields to
obtain the compound interest of the Loan A"
L"mount.";
//
// label14
//
this->label14->BackColor = System::Drawing::Color::Transparent;
this->label14->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label14->Location = System::Drawing::Point(1, 4);
this->label14->Name = L"label14";
this->label14->Size = System::Drawing::Size(502, 15);
this->label14->TabIndex = 31;
this->label14->Text = L"Tip: Using Percentage Calculator\r\n";
this->label14-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// calSnV
//

```

```

        this->calSnV->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"calSnV.BackgroundImage")));
        this->calSnV->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->calSnV->Cursor = System::Windows::Forms::Cursors::Hand;
        this->calSnV->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->calSnV->Location = System::Drawing::Point(413, 107);
        this->calSnV->Name = L"calSnV";
        this->calSnV->Size = System::Drawing::Size(143, 23);
        this->calSnV->TabIndex = 38;
        this->calSnV->Text = L"Calculate";
        this->calSnV->UseVisualStyleBackColor = true;
        this->calSnV->Click += gcnew System::EventHandler(this,
&percen::calSnV_Click);
        //
        // label3
        //
        this->label3->BackColor = System::Drawing::Color::Gold;
        this->label3->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label3->ForeColor = System::Drawing::Color::Black;
        this->label3->Location = System::Drawing::Point(4, 83);
        this->label3->Name = L"label3";
        this->label3->Size = System::Drawing::Size(552, 16);
        this->label3->TabIndex = 35;
        this->label3->Text = L"I = Interest      LA = Loan Amount      P =
Period";
        this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // panel5
        //
        this->panel5->BackColor = System::Drawing::Color::Black;
        this->panel5->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->panel5->Controls->Add(this->la1);
        this->panel5->Controls->Add(this->p);
        this->panel5->Controls->Add(this->label12);
        this->panel5->Controls->Add(this->i);
        this->panel5->Controls->Add(this->label125);
        this->panel5->Controls->Add(this->label19);
        this->panel5->Controls->Add(this->l);
        this->panel5->Controls->Add(this->label123);
        this->panel5->Controls->Add(this->label16);
        this->panel5->Location = System::Drawing::Point(3, 1);
        this->panel5->Name = L"panel5";
        this->panel5->Size = System::Drawing::Size(553, 82);
        this->panel5->TabIndex = 36;
        //
        // la1
        //
        this->la1->BackColor = System::Drawing::Color::Black;
        this->la1->BorderStyle = System::Windows::Forms::BorderStyle::None;
        this->la1->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

this->la1->ForeColor = System::Drawing::Color::White;
this->la1->Location = System::Drawing::Point(305, 29);
this->la1->MaxLength = 7;
this->la1->Multiline = true;
this->la1->Name = L"la1";
this->la1->Size = System::Drawing::Size(93, 23);
this->la1->TabIndex = 48;
this->la1->Text = L"LA";
this->la1-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
// 
// p
//
this->p->BackColor = System::Drawing::Color::Black;
this->p->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->p->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->p->ForeColor = System::Drawing::Color::White;
this->p->Location = System::Drawing::Point(415, 27);
this->p->MaxLength = 5;
this->p->Multiline = true;
this->p->Name = L"p";
this->p->Size = System::Drawing::Size(68, 26);
this->p->TabIndex = 47;
this->p->Text = L"P";
this->p-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
// 
// label2
//
this->label2->AutoSize = true;
this->label2->BackColor = System::Drawing::Color::Black;
this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label2->ForeColor = System::Drawing::Color::Gold;
this->label2->Location = System::Drawing::Point(290, 31);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(21, 22);
this->label2->TabIndex = 44;
this->label2->Text = L"+";
// 
// i
//
this->i->BackColor = System::Drawing::Color::Black;
this->i->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->i->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->i->ForeColor = System::Drawing::Color::White;
this->i->Location = System::Drawing::Point(116, 16);
this->i->MaxLength = 3;
this->i->Multiline = true;
this->i->Name = L"i";
this->i->Size = System::Drawing::Size(47, 23);
this->i->TabIndex = 35;

```

```

    this->i->Text = L"I";
    this->i->TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    //
    // label25
    //
    this->label25->BackColor = System::Drawing::Color::Black;
    this->label25->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label25->ForeColor = System::Drawing::Color::Gold;
    this->label25->Location = System::Drawing::Point(113, 16);
    this->label25->Name = L"label25";
    this->label25->Size = System::Drawing::Size(54, 81);
    this->label25->TabIndex = 37;
    this->label25->Text = L"__\r\n100\r\n";
    this->label25-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // label19
    //
    this->label19->AutoSize = true;
    this->label19->BackColor = System::Drawing::Color::Black;
    this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label19->ForeColor = System::Drawing::Color::Gold;
    this->label19->Location = System::Drawing::Point(95, 20);
    this->label19->Name = L"label19";
    this->label19->Size = System::Drawing::Size(28, 37);
    this->label19->TabIndex = 40;
    this->label19->Text = L "(";
    //
    // l
    //
    this->l->BackColor = System::Drawing::Color::Black;
    this->l->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->l->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->l->ForeColor = System::Drawing::Color::White;
    this->l->Location = System::Drawing::Point(185, 29);
    this->l->MaxLength = 7;
    this->l->Multiline = true;
    this->l->Name = L"l";
    this->l->Size = System::Drawing::Size(93, 23);
    this->l->TabIndex = 39;
    this->l->Text = L"LA";
    this->l-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    this->l->TextChanged += gcnew System::EventHandler(this,
&percen::l_TextChanged);
    //
    // label23
    //
    this->label23->AutoSize = true;
    this->label23->BackColor = System::Drawing::Color::Black;

```

```

    this->label23->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
    this->label23->ForeColor = System::Drawing::Color::Gold;
    this->label23->Location = System::Drawing::Point(169, 30);
    this->label23->Name = L"label23";
    this->label23->Size = System::Drawing::Size(21, 22);
    this->label23->TabIndex = 38;
    this->label23->Text = L"x";
    //
    // label16
    //
    this->label16->AutoSize = true;
    this->label16->BackColor = System::Drawing::Color::Black;
    this->label16->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
    this->label16->ForeColor = System::Drawing::Color::Gold;
    this->label16->Location = System::Drawing::Point(270, 20);
    this->label16->Name = L"label16";
    this->label16->Size = System::Drawing::Size(28, 37);
    this->label16->TabIndex = 43;
    this->label16->Text = L")";
    //
    // panel7
    //
    this->panel7->BackColor = System::Drawing::Color::Black;
    this->panel7->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->panel7->Controls->Add(this->op);
    this->panel7->Controls->Add(this->i1);
    this->panel7->Controls->Add(this->label130);
    this->panel7->Controls->Add(this->label126);
    this->panel7->Controls->Add(this->label128);
    this->panel7->Controls->Add(this->label129);
    this->panel7->Controls->Add(this->label14);
    this->panel7->Controls->Add(this->label12);
    this->panel7->Controls->Add(this->m2);
    this->panel7->Controls->Add(this->label11);
    this->panel7->Controls->Add(this->label127);
    this->panel7->Controls->Add(this->m1);
    this->panel7->Controls->Add(this->d);
    this->panel7->Controls->Add(this->m);
    this->panel7->Controls->Add(this->label122);
    this->panel7->Controls->Add(this->label10);
    this->panel7->Controls->Add(this->label124);
    this->panel7->Location = System::Drawing::Point(1, 1);
    this->panel7->Name = L"panel7";
    this->panel7->Size = System::Drawing::Size(574, 82);
    this->panel7->TabIndex = 36;
    //
    // op
    //
    this->op->BackColor = System::Drawing::Color::Black;
    this->op->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->op->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

        this->op->ForeColor = System::Drawing::Color::White;
        this->op->Location = System::Drawing::Point(73, 14);
        this->op->MaxLength = 7;
        this->op->Multiline = true;
        this->op->Name = L"op";
        this->op->Size = System::Drawing::Size(90, 23);
        this->op->TabIndex = 39;
        this->op->Text = L"OP";
        this->op-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
        //
        // i1
        //
        this->i1->BackColor = System::Drawing::Color::Black;
        this->i1->BorderStyle = System::Windows::Forms::BorderStyle::None;
        this->i1->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->i1->ForeColor = System::Drawing::Color::White;
        this->i1->Location = System::Drawing::Point(459, 13);
        this->i1->MaxLength = 5;
        this->i1->Multiline = true;
        this->i1->Name = L"i1";
        this->i1->Size = System::Drawing::Size(49, 26);
        this->i1->TabIndex = 58;
        this->i1->Text = L"I";
        this->i1-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
        //
        // label30
        //
        this->label30->BackColor = System::Drawing::Color::Black;
        this->label30->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label30->ForeColor = System::Drawing::Color::Gold;
        this->label30->Location = System::Drawing::Point(439, 22);
        this->label30->Name = L"label30";
        this->label30->Size = System::Drawing::Size(86, 52);
        this->label30->TabIndex = 59;
        this->label30->Text = L" _____\r\n100 x 12";
        //
        // label26
        //
        this->label26->AutoSize = true;
        this->label26->BackColor = System::Drawing::Color::Black;
        this->label26->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label26->ForeColor = System::Drawing::Color::Gold;
        this->label26->Location = System::Drawing::Point(57, 4);
        this->label26->Name = L"label26";
        this->label26->Size = System::Drawing::Size(28, 37);
        this->label26->TabIndex = 40;
        this->label26->Text = L"(";
        //
        // label28
        //

```

```

        this->label28->AutoSize = true;
        this->label28->BackColor = System::Drawing::Color::Black;
        this->label28->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label28->ForeColor = System::Drawing::Color::Gold;
        this->label28->Location = System::Drawing::Point(253, 4);
        this->label28->Name = L"label28";
        this->label28->Size = System::Drawing::Size(28, 37);
        this->label28->TabIndex = 43;
        this->label28->Text = L")";
    //
    // label29
    //
    this->label29->AutoSize = true;
    this->label29->BackColor = System::Drawing::Color::Black;
    this->label29->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
    this->label29->ForeColor = System::Drawing::Color::Gold;
    this->label29->Location = System::Drawing::Point(424, 31);
    this->label29->Name = L"label29";
    this->label29->Size = System::Drawing::Size(21, 22);
    this->label29->TabIndex = 57;
    this->label29->Text = L"x";
    //
    // label14
    //
    this->label14->AutoSize = true;
    this->label14->BackColor = System::Drawing::Color::Black;
    this->label14->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
    this->label14->ForeColor = System::Drawing::Color::Gold;
    this->label14->Location = System::Drawing::Point(407, 21);
    this->label14->Name = L"label14";
    this->label14->Size = System::Drawing::Size(28, 37);
    this->label14->TabIndex = 56;
    this->label14->Text = L")";
    //
    // label12
    //
    this->label12->AutoSize = true;
    this->label12->BackColor = System::Drawing::Color::Black;
    this->label12->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
    this->label12->ForeColor = System::Drawing::Color::Gold;
    this->label12->Location = System::Drawing::Point(376, 32);
    this->label12->Name = L"label12";
    this->label12->Size = System::Drawing::Size(37, 22);
    this->label12->TabIndex = 55;
    this->label12->Text = L"+ 1";
    //
    // m2
    //
    this->m2->BackColor = System::Drawing::Color::Black;
    this->m2->BorderStyle = System::Windows::Forms::BorderStyle::None;

```

```

        this->m2->Enabled = false;
        this->m2->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
        this->m2->ForeColor = System::Drawing::Color::White;
        this->m2->Location = System::Drawing::Point(333, 31);
        this->m2->MaxLength = 5;
        this->m2->Multiline = true;
        this->m2->Name = L"m2";
        this->m2->Size = System::Drawing::Size(49, 26);
        this->m2->TabIndex = 54;
        this->m2->Text = L"M";
        this->m2-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
        //
        // label11
        //
        this->label11->AutoSize = true;
        this->label11->BackColor = System::Drawing::Color::Black;
        this->label11->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
        this->label11->ForeColor = System::Drawing::Color::Gold;
        this->label11->Location = System::Drawing::Point(316, 21);
        this->label11->Name = L"label11";
        this->label11->Size = System::Drawing::Size(28, 37);
        this->label11->TabIndex = 53;
        this->label11->Text = L "(";
        //
        // label27
        //
        this->label27->AutoSize = true;
        this->label27->BackColor = System::Drawing::Color::Black;
        this->label27->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
        this->label27->ForeColor = System::Drawing::Color::Gold;
        this->label27->Location = System::Drawing::Point(265, 33);
        this->label27->Name = L"label27";
        this->label27->Size = System::Drawing::Size(21, 22);
        this->label27->TabIndex = 38;
        this->label27->Text = L"x";
        //
        // m1
        //
        this->m1->BackColor = System::Drawing::Color::Black;
        this->m1->BorderStyle = System::Windows::Forms::BorderStyle::None;
        this->m1->Enabled = false;
        this->m1->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
        this->m1->ForeColor = System::Drawing::Color::White;
        this->m1->Location = System::Drawing::Point(277, 16);
        this->m1->MaxLength = 5;
        this->m1->Multiline = true;
        this->m1->Name = L"m1";
        this->m1->Size = System::Drawing::Size(49, 26);
        this->m1->TabIndex = 52;

```

```

    this->m1->Text = L"M";
    this->m1->TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    //
    // d
    //
    this->d->BackColor = System::Drawing::Color::Black;
    this->d->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->d->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->d->ForeColor = System::Drawing::Color::White;
    this->d->Location = System::Drawing::Point(171, 14);
    this->d->MaxLength = 7;
    this->d->Multiline = true;
    this->d->Name = L"d";
    this->d->Size = System::Drawing::Size(89, 23);
    this->d->TabIndex = 48;
    this->d->Text = L"D";
    this->d-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    //
    // m
    //
    this->m->BackColor = System::Drawing::Color::Black;
    this->m->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->m->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->m->ForeColor = System::Drawing::Color::White;
    this->m->Location = System::Drawing::Point(132, 48);
    this->m->MaxLength = 5;
    this->m->Multiline = true;
    this->m->Name = L"m";
    this->m->Size = System::Drawing::Size(68, 26);
    this->m->TabIndex = 47;
    this->m->Text = L"M";
    this->m-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    this->m->TextChanged += gcnew System::EventHandler(this,
&percen::m_TextChanged);
    //
    // label22
    //
    this->label22->AutoSize = true;
    this->label22->BackColor = System::Drawing::Color::Black;
    this->label22->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label22->ForeColor = System::Drawing::Color::Gold;
    this->label22->Location = System::Drawing::Point(159, 13);
    this->label22->Name = L"label22";
    this->label22->Size = System::Drawing::Size(16, 22);
    this->label22->TabIndex = 44;
    this->label22->Text = L"-";
    //
    // label10
    //

```

```

        this->label10->BackColor = System::Drawing::Color::Black;
        this->label10->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label10->ForeColor = System::Drawing::Color::Gold;
        this->label10->Location = System::Drawing::Point(85, 3);
        this->label10->Name = L"label10";
        this->label10->Size = System::Drawing::Size(175, 81);
        this->label10->TabIndex = 51;
        this->label10->Text = L"_____";
        this->label10-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// label24
//
this->label24->BackColor = System::Drawing::Color::Black;
this->label24->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label24->ForeColor = System::Drawing::Color::Gold;
        this->label24->Location = System::Drawing::Point(274, 5);
        this->label24->Name = L"label24";
        this->label24->Size = System::Drawing::Size(54, 81);
        this->label24->TabIndex = 37;
        this->label24->Text = L"__\r\n2";
        this->label24-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// label20
//
this->label20->BackColor = System::Drawing::Color::Gold;
this->label20->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label20->ForeColor = System::Drawing::Color::Black;
        this->label20->Location = System::Drawing::Point(2, 83);
        this->label20->Name = L"label20";
        this->label20->Size = System::Drawing::Size(573, 16);
        this->label20->TabIndex = 35;
        this->label20->Text = L"Tot = Total Amount to be Paid      I =
Interest      OP = Outright Price      M = Mon"
                           L"ths      D = Down Payment";
        this->label20-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// button3
//
this->button3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"button3.BackgroundImage")));
        this->button3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->button3->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button3->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->button3->ForeColor = System::Drawing::Color::Black;
        this->button3->Location = System::Drawing::Point(426, 107);
        this->button3->Name = L"button3";
        this->button3->Size = System::Drawing::Size(143, 23);

```

```

        this->button3->TabIndex = 38;
        this->button3->Text = L"Calculate";
        this->button3->UseVisualStyleBackColor = true;
        this->button3->Click += gcnew System::EventHandler(this,
&percen::button3_Click);
        //
        // panel6
        //
        this->panel6->BackColor = System::Drawing::Color::Transparent;
        this->panel6->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->panel6->Controls->Add(this->label17);
        this->panel6->Controls->Add(this->label18);
        this->panel6->ForeColor = System::Drawing::Color::Black;
        this->panel6->Location = System::Drawing::Point(3, 296);
        this->panel6->Name = L"panel6";
        this->panel6->Size = System::Drawing::Size(566, 52);
        this->panel6->TabIndex = 37;
        //
        // label17
        //
        this->label17->BackColor = System::Drawing::Color::Transparent;
        this->label17->Location = System::Drawing::Point(1, 19);
        this->label17->Name = L"label17";
        this->label17->Size = System::Drawing::Size(552, 30);
        this->label17->TabIndex = 32;
        this->label17->Text = L"Enter values to all the required fields to
perform the Calculation";
        //
        // label18
        //
        this->label18->BackColor = System::Drawing::Color::Transparent;
        this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label18->Location = System::Drawing::Point(1, 4);
        this->label18->Name = L"label18";
        this->label18->Size = System::Drawing::Size(502, 15);
        this->label18->TabIndex = 31;
        this->label18->Text = L"Tip: Using Percentage Calculator\r\n";
        this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // button2
        //
        this->button2->BackColor = System::Drawing::Color::Maroon;
        this->button2->Cursor = System::Windows::Forms::Cursors::Hand;
        this->button2->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
        this->button2->ForeColor = System::Drawing::Color::White;
        this->button2->Location = System::Drawing::Point(304, 107);
        this->button2->Name = L"button2";
        this->button2->Size = System::Drawing::Size(116, 23);
        this->button2->TabIndex = 39;
        this->button2->Text = L"Clear Values";
        this->button2->UseVisualStyleBackColor = false;
        //
        // showhow1
        //

```

```

    this->showhow1->BackColor = System::Drawing::Color::Transparent;
    this->showhow1->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->showhow1->Controls->Add(this->sfa);
    this->showhow1->Controls->Add(this->ss3);
    this->showhow1->Controls->Add(this->tnl);
    this->showhow1->Controls->Add(this->ss2);
    this->showhow1->Controls->Add(this->label13);
    this->showhow1->Controls->Add(this->ss1);
    this->showhow1->Controls->Add(this->label15);
    this->showhow1->ForeColor = System::Drawing::Color::Black;
    this->showhow1->Location = System::Drawing::Point(4, 138);
    this->showhow1->Name = L"showhow1";
    this->showhow1->Size = System::Drawing::Size(566, 152);
    this->showhow1->TabIndex = 40;
    this->showhow1->Visible = false;
    //
    // sfa
    //
    this->sfa->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->sfa->Location = System::Drawing::Point(233, 116);
    this->sfa->Name = L"sfa";
    this->sfa->Size = System::Drawing::Size(233, 18);
    this->sfa->TabIndex = 30;
    this->sfa->Text = L"= 9999999999";
    //
    // ss3
    //
    this->ss3->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->ss3->Location = System::Drawing::Point(49, 105);
    this->ss3->Name = L"ss3";
    this->ss3->Size = System::Drawing::Size(186, 36);
    this->ss3->TabIndex = 29;
    this->ss3->Text = L"Amount to be Paid at the\r\nEnd of First Year ";
    this->ss3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // tnl
    //
    this->tnl->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
    this->tnl->Dock = System::Windows::Forms::DockStyle::Top;
    this->tnl->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->tnl->Location = System::Drawing::Point(0, 0);
    this->tnl->Name = L"tnl";
    this->tnl->Size = System::Drawing::Size(564, 21);
    this->tnl->TabIndex = 28;
    this->tnl->Text = L"LA = I = P =";
    this->tnl-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // ss2

```

```

//
this->ss2->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ss2->Location = System::Drawing::Point(233, 72);
this->ss2->Name = L"ss2";
this->ss2->Size = System::Drawing::Size(154, 18);
this->ss2->TabIndex = 27;
this->ss2->Text = L"= 9999999999";
//
// label13
//
this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label13->Location = System::Drawing::Point(41, 70);
this->label13->Name = L"label13";
this->label13->Size = System::Drawing::Size(187, 15);
this->label13->TabIndex = 26;
this->label13->Text = L"Interest to be Paid\r\n";
this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
//
// ss1
//
this->ss1->Font = (gcnew System::Drawing::Font(L"Arial", 11,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ss1->Location = System::Drawing::Point(234, 31);
this->ss1->Name = L:ss1";
this->ss1->Size = System::Drawing::Size(174, 18);
this->ss1->TabIndex = 25;
this->ss1->Text = L"= (9999 - 9999) + 9999";
//
// label15
//
this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label15->Location = System::Drawing::Point(18, 31);
this->label15->Name = L"label15";
this->label15->Size = System::Drawing::Size(211, 18);
this->label15->TabIndex = 24;
this->label15->Text = L"Balance to be Paid";
this->label15-> TextAlign =
System::Drawing::ContentAlignment::TopRight;
//
// hirep
//
this->hirep->BackColor = System::Drawing::Color::Transparent;
this->hirep->Controls->Add(this->showhow1);
this->hirep->Controls->Add(this->button2);
this->hirep->Controls->Add(this->panel6);
this->hirep->Controls->Add(this->button3);
this->hirep->Controls->Add(this->label20);
this->hirep->Controls->Add(this->panel7);
this->hirep->Location = System::Drawing::Point(4, 98);
this->hirep->Name = L"hirep";

```

```

        this->hirep->Size = System::Drawing::Size(575, 349);
        this->hirep->TabIndex = 36;
        this->hirep->Visible = false;
        //
        // percen
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->ClientSize = System::Drawing::Size(586, 452);
        this->Controls->Add(this->hirep);
        this->Controls->Add(this->panel3);
        this->Controls->Add(this->ps);
        this->Controls->Add(this->compund);
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"percen";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"Percentage Calculator";
        this->Load += gcnew System::EventHandler(this,
&percen::percen_Load);
        this->panel3->ResumeLayout(false);
        this->panel3->PerformLayout();
        this->ps->ResumeLayout(false);
        this->ps->PerformLayout();
        this->compund->ResumeLayout(false);
        this->showHow->ResumeLayout(false);
        this->panel2->ResumeLayout(false);
        this->panel5->ResumeLayout(false);
        this->panel5->PerformLayout();
        this->panel7->ResumeLayout(false);
        this->panel7->PerformLayout();
        this->panel6->ResumeLayout(false);
        this->showhow1->ResumeLayout(false);
        this->hirep->ResumeLayout(false);
        this->ResumeLayout(false);

    }

#pragma endregion
    double la, ir, pe, dow ,tot;
    void calSn(){
        double x = pe;
        tot = la;
        while(x != 0){
            tot= ((tot * ir)/100) + tot;
            x--;
        }
        sn1->Text="LA = "+la+"
I = "+ir +"%
Period = "+pe;
        s1->Text = " = "+ir +" x "+la+" /100";
        s2->Text = " = "+System::Convert::ToString(la) + " + " +
System::Convert::ToString(la*(ir/100));
        s3->Text ="Amount to be Paid at the End of " + pe+ " Year";

```

```

        }
        void calHP(){
            tn1->Text="OP = "+la+"           I = "+ir+"%           Months =
"+pe+"           D = "+dow;
            ss1->Text = " = "+System::Convert::ToString(la-dow);
            ss2->Text = " = "+System::Convert::ToString((la-dow) *
(pe*(pe+1))/2 * ir/(100*12));
            ss3->Text ="Total Amount to Paid(with Interest) at the end of "+pe;
            tot = (la-dow)+((la-dow) * (pe*(pe+1))/2 * ir/(100*12));
            sfa->Text=" = "+System::Convert::ToString(tot);
        }
        void setData(String^ x, String^ b, String^ c, String^ z){
            la =System::Convert::.ToDouble(x);
            ir = System::Convert::.ToDouble(b);
            pe=System::Convert::.ToDouble(c);
            dow=System::Convert::.ToDouble(z);
        }
        void setf(){
            panel2->Location=System::Drawing::Point(3,136);
            this->Size=System::Drawing::Size(585,328);
            compund->Location = System::Drawing::Point(4, 98);
            compund->Size = System::Drawing::Size(564,197);
            compund->Visible=true;
            showHow->Visible=false;
            this->Text = "Percentage Calculator - Compound Interest";
            caln->Text="Compound Interest";
        }
        Boolean detValues(TextBox^ a, TextBox^ b, TextBox^ c){
            if(a->Text != "" && b->Text != "" && c->Text != ""){
                try{
                    setData(a->Text,b->Text,c->Text, "0");
                    calSn();
                    return true;
                }catch(Exception^ ex){
                    MessageBox::Show("Enter Only Numerical Values "+ex-
>Message, "MOLE Advisor");
                    return false;
                }
            }else{
                MessageBox::Show("Enter Values for All Required Fields", "MOLE
Advisor");
                return false;
            }
        }
        Boolean detValues1(TextBox^ a, TextBox^ b, TextBox^ c,TextBox^ d){
            if(a->Text != "" && b->Text != "" && c->Text != "" && d->Text != ""){
                try{
                    setData(a->Text,b->Text,c->Text, d->Text);
                    calHP();
                    return true;
                }catch(Exception^ ex){
                    MessageBox::Show("Enter Only Numerical Values "+ex-
>Message, "MOLE Advisor");
                    return false;
                }
            }else{
                MessageBox::Show("Enter Values for All Required Fields", "MOLE
Advisor");
            }
        }
    }
}

```

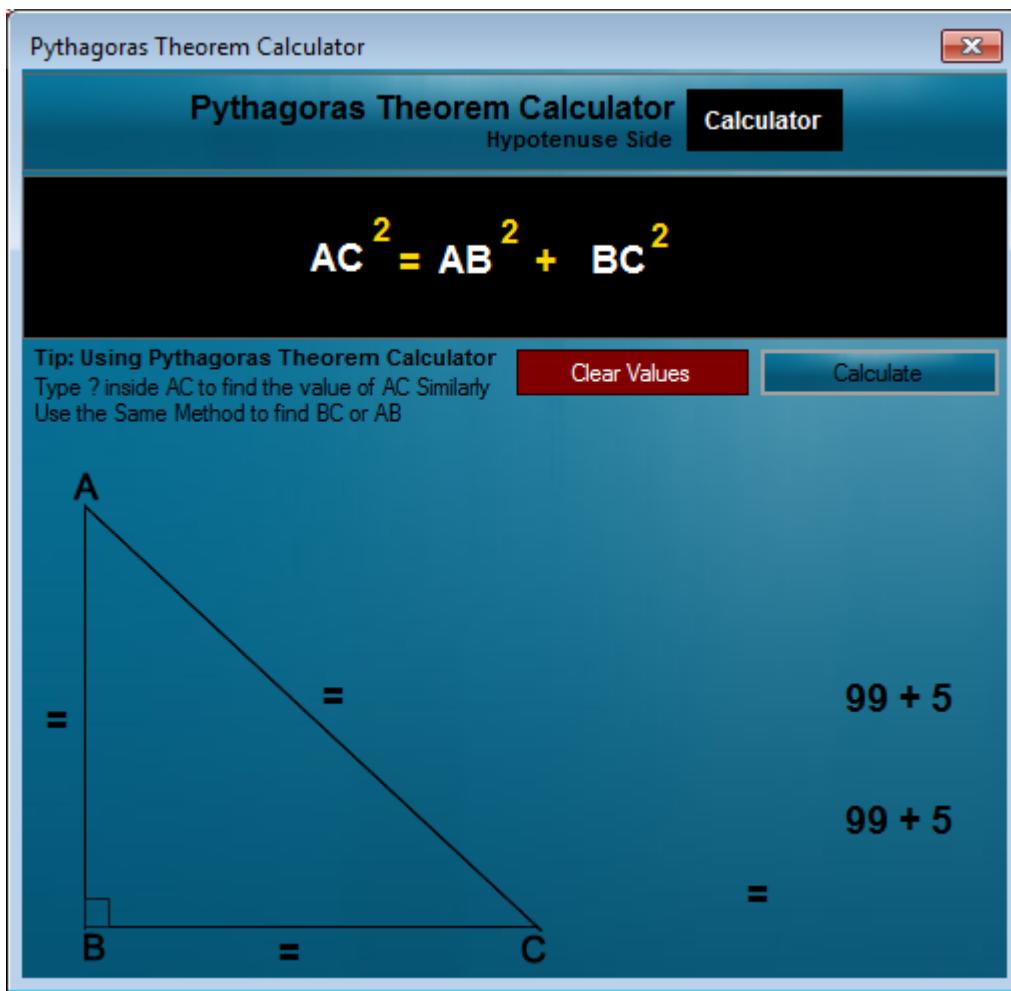
```

                return false;
            }
        }
    private: System::Void percen_Load(System::Object^  sender, System::EventArgs^  e) {
        tn->Checked=true;
        setf();
    }
    private: System::Void calSnV_Click(System::Object^  sender, System::EventArgs^  e) {
        if(detValues(l,i,p)){
            compund->Location = System::Drawing::Point(4, 98);
            compund->Size = System::Drawing::Size(563, 349);
            this->Size=System::Drawing::Size(585,491);
            showHow->Visible=true;
            panel2->Location=System::Drawing::Point(3,296);
            fa->Text = " = "+System::Convert::ToString(tot);
        }
    }
    private: System::Void tn_CheckedChanged(System::Object^  sender, System::EventArgs^  e) {
        setf();
        hirep->Visible=false;
    }
    private: System::Void l_TextChanged(System::Object^  sender, System::EventArgs^  e) {
        la1->Text=l->Text;
        la1->Enabled=false;
    }
    private: System::Void hp_CheckedChanged(System::Object^  sender, System::EventArgs^  e) {
        panel6->Location=System::Drawing::Point(3,136);
        this->Size=System::Drawing::Size(602, 328);
        hirep->Location = System::Drawing::Point(4, 98);
        hirep->Size = System::Drawing::Size(575,349);
        hirep->Visible=true;
        showhow1->Visible=false;
        this->Text = "Percentage Calculator - Hire Purchase";
        caln->Text="Hire Purchase";
    }
    private: System::Void button3_Click(System::Object^  sender, System::EventArgs^  e) {
        if(detValues1(op,i1,m,d)){
            compund->Location = System::Drawing::Point(4, 98);
            compund->Size = System::Drawing::Size(563, 349);
            this->Size=System::Drawing::Size(585,491);
            showhow1->Visible=true;
            panel6->Location=System::Drawing::Point(3,296);
            fa->Text = " = "+System::Convert::ToString(tot);
        }
    }
    private: System::Void m_TextChanged(System::Object^  sender, System::EventArgs^  e) {
        m1->Text=m->Text;
        m2->Text=m->Text;
        m1->Enabled=false;
        m2->Enabled=false;
    }
}
};

}

```

14. pyth.cpp (Pythagoras' Theorem)



```
#include "pyth.h"
```

15. pyth.h (Pythagoras' Theorem)

```
#pragma once

namespace mCalculator {

    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 pyth
    /// </summary>
    public ref class pyth : public System::Windows::Forms::Form
    {
    public:
        pyth(void)
        {
            InitializeComponent();
            this->Size = System::Drawing::Size(508,228);
        }

    protected:
        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        ~pyth()
        {
            if (components)
            {
                delete components;
            }
        }
    internal: System::Windows::Forms::Panel^ panel3;
    protected:
    internal: System::Windows::Forms::Label^ caln;
    internal: System::Windows::Forms::Label^ label5;
    internal: System::Windows::Forms::Label^ label9;
    private: System::Windows::Forms::PictureBox^ pictureBox1;

    private:

    internal: System::Windows::Forms::Button^ button2;
    internal: System::Windows::Forms::Button^ button3;
    internal: System::Windows::Forms::Panel^ panel7;
    internal: System::Windows::Forms::Label^ label6;
    internal: System::Windows::Forms::Label^ label4;
    internal: System::Windows::Forms::Label^ label3;
    internal: System::Windows::Forms::TextBox^ b;

    internal: System::Windows::Forms::TextBox^ a;
    internal: System::Windows::Forms::Label^ label2;
```

```

internal: System::Windows::Forms::Label^  label1;
internal: System::Windows::Forms::TextBox^  c;

internal: System::Windows::Forms::Label^  label18;
internal: System::Windows::Forms::Label^  label17;
internal: System::Windows::Forms::Label^  ab;
internal: System::Windows::Forms::Label^  bc;

internal: System::Windows::Forms::Label^  ac;
private: System::Windows::Forms::PictureBox^  abN;
internal:
internal: System::Windows::Forms::Label^  fa;
private:
internal: System::Windows::Forms::Label^  s2;
internal: System::Windows::Forms::Label^  s1;
private: System::Windows::Forms::PictureBox^  bcN;
internal:
private: System::Windows::Forms::PictureBox^  acN;

private:

private:

internal:

internal:

internal:

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
void InitializeComponent(void)
{
    System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(pyth::typeid));
    this->panel3 = (gcnew System::Windows::Forms::Panel());
    this->caln = (gcnew System::Windows::Forms::Label());
    this->label5 = (gcnew System::Windows::Forms::Label());
    this->label9 = (gcnew System::Windows::Forms::Label());
    this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
    this->button2 = (gcnew System::Windows::Forms::Button());
    this->button3 = (gcnew System::Windows::Forms::Button());
    this->panel7 = (gcnew System::Windows::Forms::Panel());
}

```

```

this->label6 = (gcnew System::Windows::Forms::Label());
this->label4 = (gcnew System::Windows::Forms::Label());
this->label3 = (gcnew System::Windows::Forms::Label());
this->b = (gcnew System::Windows::Forms::TextBox());
this->a = (gcnew System::Windows::Forms::TextBox());
this->label2 = (gcnew System::Windows::Forms::Label());
this->label1 = (gcnew System::Windows::Forms::Label());
this->c = (gcnew System::Windows::Forms::TextBox());
this->label18 = (gcnew System::Windows::Forms::Label());
this->label17 = (gcnew System::Windows::Forms::Label());
this->ab = (gcnew System::Windows::Forms::Label());
this->bc = (gcnew System::Windows::Forms::Label());
this->ac = (gcnew System::Windows::Forms::Label());
this->abN = (gcnew System::Windows::Forms::PictureBox());
this->fa = (gcnew System::Windows::Forms::Label());
this->s2 = (gcnew System::Windows::Forms::Label());
this->s1 = (gcnew System::Windows::Forms::Label());
this->bcN = (gcnew System::Windows::Forms::PictureBox());
this->acN = (gcnew System::Windows::Forms::PictureBox());
this->panel3->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox1))->BeginInit();
    this->panel7->SuspendLayout();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->abN))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->bcN))->BeginInit();
            (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->acN))->BeginInit();
                this->SuspendLayout();
                //
                // panel3
                //
                this->panel3->BackColor = System::Drawing::Color::DodgerBlue;
                this->panel3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^ >(resources->GetObject(L"panel3.BackgroundImage")));
                this->panel3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
                this->panel3->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
                this->panel3->Controls->Add(this->caln);
                this->panel3->Controls->Add(this->label15);
                this->panel3->Controls->Add(this->label19);
                this->panel3->Location = System::Drawing::Point(0, 2);
                this->panel3->Name = L"panel3";
                this->panel3->Size = System::Drawing::Size(555, 49);
                this->panel3->TabIndex = 8;
                //
                // caln
                //
                this->caln->BackColor = System::Drawing::Color::Transparent;
                this->caln->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                    static_cast<System::Byte>(0)));
                this->caln->Location = System::Drawing::Point(141, 25);
                this->caln->Name = L"caln";
                this->caln->Size = System::Drawing::Size(187, 14);

```

```

        this->caln->TabIndex = 2;
        this->caln->Text = L"Hypotenuse Side";
        this->caln->TextAlign =
System::Drawing::ContentAlignment::MiddleRight;
        //
// label5
//
this->label5->BackColor = System::Drawing::Color::Black;
this->label5->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label5->ForeColor = System::Drawing::Color::White;
this->label5->Location = System::Drawing::Point(331, 7);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(78, 31);
this->label5->TabIndex = 0;
this->label5->Text = L"Calculator";
this->label5->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// label9
//
this->label9->AutoSize = true;
this->label9->BackColor = System::Drawing::Color::Transparent;
this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label9->Location = System::Drawing::Point(79, 7);
this->label9->Name = L"label9";
this->label9->Size = System::Drawing::Size(251, 19);
this->label9->TabIndex = 1;
this->label9->Text = L"Pythagoras Theorem Calculator";
//
// pictureBox1
//
this->pictureBox1->BackColor = System::Drawing::Color::Transparent;
this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
this->pictureBox1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
this->pictureBox1->Location = System::Drawing::Point(20, 196);
this->pictureBox1->Name = L"pictureBox1";
this->pictureBox1->Size = System::Drawing::Size(253, 261);
this->pictureBox1->TabIndex = 0;
this->pictureBox1->TabStop = false;
this->pictureBox1->Click += gcnew System::EventHandler(this,
&pyth::pictureBox1_Click);
//
// button2
//
this->button2->BackColor = System::Drawing::Color::Maroon;
this->button2->Cursor = System::Windows::Forms::Cursors::Hand;
this->button2->FlatStyle = System::Windows::Forms::FlatStyle::PopUp;
this->button2->ForeColor = System::Drawing::Color::White;
this->button2->Location = System::Drawing::Point(247, 140);
this->button2->Name = L"button2";
this->button2->Size = System::Drawing::Size(116, 23);

```

```

this->button2->TabIndex = 45;
this->button2->Text = L"Clear Values";
this->button2->UseVisualStyleBackColor = false;
//
// button3
//
this->button3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"button3.BackgroundImage")));
this->button3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->button3->Cursor = System::Windows::Forms::Cursors::Hand;
this->button3->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
this->button3->ForeColor = System::Drawing::Color::Black;
this->button3->Location = System::Drawing::Point(369, 140);
this->button3->Name = L"button3";
this->button3->Size = System::Drawing::Size(119, 23);
this->button3->TabIndex = 44;
this->button3->Text = L"Calculate";
this->button3->UseVisualStyleBackColor = true;
this->button3->Click += gcnew System::EventHandler(this,
&pyth::button3_Click);
//
// panel7
//
this->panel7->BackColor = System::Drawing::Color::Black;
this->panel7->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->panel7->Controls->Add(this->label6);
this->panel7->Controls->Add(this->label4);
this->panel7->Controls->Add(this->label3);
this->panel7->Controls->Add(this->b);
this->panel7->Controls->Add(this->a);
this->panel7->Controls->Add(this->label2);
this->panel7->Controls->Add(this->label1);
this->panel7->Controls->Add(this->c);
this->panel7->Location = System::Drawing::Point(0, 53);
this->panel7->Name = L"panel7";
this->panel7->Size = System::Drawing::Size(502, 82);
this->panel7->TabIndex = 46;
//
// label6
//
this->label6->AutoSize = true;
this->label6->BackColor = System::Drawing::Color::Black;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label6->ForeColor = System::Drawing::Color::Gold;
this->label6->Location = System::Drawing::Point(170, 17);
this->label6->Name = L"label6";
this->label6->Size = System::Drawing::Size(18, 19);
this->label6->TabIndex = 60;
this->label6->Text = L"2";
//
// label4
//
this->label4->AutoSize = true;

```

```

        this->label4->BackColor = System::Drawing::Color::Black;
        this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label4->ForeColor = System::Drawing::Color::Gold;
        this->label4->Location = System::Drawing::Point(234, 18);
        this->label4->Name = L"label4";
        this->label4->Size = System::Drawing::Size(18, 19);
        this->label4->TabIndex = 59;
        this->label4->Text = L"2";
    //
    // label3
    //
    this->label3->AutoSize = true;
    this->label3->BackColor = System::Drawing::Color::Black;
    this->label3->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->label3->ForeColor = System::Drawing::Color::Gold;
    this->label3->Location = System::Drawing::Point(309, 20);
    this->label3->Name = L"label3";
    this->label3->Size = System::Drawing::Size(18, 19);
    this->label3->TabIndex = 58;
    this->label3->Text = L"2";
    //
    // b
    //
    this->b->BackColor = System::Drawing::Color::Black;
    this->b->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->b->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->b->ForeColor = System::Drawing::Color::White;
    this->b->Location = System::Drawing::Point(277, 30);
    this->b->MaxLength = 2;
    this->b->Multiline = true;
    this->b->Name = L"b";
    this->b->Size = System::Drawing::Size(41, 23);
    this->b->TabIndex = 57;
    this->b->Text = L"BC";
    this->b-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
    //
    // a
    //
    this->a->BackColor = System::Drawing::Color::Black;
    this->a->BorderStyle = System::Windows::Forms::BorderStyle::None;
    this->a->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->a->ForeColor = System::Drawing::Color::White;
    this->a->Location = System::Drawing::Point(200, 30);
    this->a->MaxLength = 2;
    this->a->Multiline = true;
    this->a->Name = L"a";
    this->a->Size = System::Drawing::Size(41, 23);
    this->a->TabIndex = 56;
    this->a->Text = L"AB";

```

```

    this->a->TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// label2
//
this->label2->AutoSize = true;
this->label2->BackColor = System::Drawing::Color::Black;
this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label2->ForeColor = System::Drawing::Color::Gold;
this->label2->Location = System::Drawing::Point(251, 31);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(21, 22);
this->label2->TabIndex = 55;
this->label2->Text = L"+";
//
// label1
//
this->label1->AutoSize = true;
this->label1->BackColor = System::Drawing::Color::Black;
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label1->ForeColor = System::Drawing::Color::Gold;
this->label1->Location = System::Drawing::Point(183, 31);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(21, 22);
this->label1->TabIndex = 53;
this->label1->Text = L"=";
//
// c
//
this->c->BackColor = System::Drawing::Color::Black;
this->c->BorderStyle = System::Windows::Forms::BorderStyle::None;
this->c->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->c->ForeColor = System::Drawing::Color::White;
this->c->Location = System::Drawing::Point(136, 29);
this->c->MaxLength = 2;
this->c->Multiline = true;
this->c->Name = L"c";
this->c->Size = System::Drawing::Size(41, 23);
this->c->TabIndex = 39;
this->c->Text = L"AC";
this->c-> TextAlign =
System::Windows::Forms::HorizontalAlignment::Center;
//
// label18
//
this->label18->BackColor = System::Drawing::Color::Transparent;
this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label18->Location = System::Drawing::Point(3, 137);
this->label18->Name = L"label18";
this->label18->Size = System::Drawing::Size(238, 15);

```

```

        this->label18->TabIndex = 47;
        this->label18->Text = L"Tip: Using Pythagoras Theorem Calculator";
        this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
// label17
//
this->label17->BackColor = System::Drawing::Color::Transparent;
this->label17->Location = System::Drawing::Point(3, 152);
this->label17->Name = L"label17";
this->label17->Size = System::Drawing::Size(237, 31);
this->label17->TabIndex = 48;
this->label17->Text = L"Type \? inside AC to find the value of AC
Similarly Use the Same Method to find BC"
L" or AB";
//
// ab
//
this->ab->AutoSize = true;
this->ab->BackColor = System::Drawing::Color::Transparent;
this->ab->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ab->ForeColor = System::Drawing::Color::Black;
this->ab->Location = System::Drawing::Point(8, 314);
this->ab->Name = L"ab";
this->ab->Size = System::Drawing::Size(21, 22);
this->ab->TabIndex = 54;
this->ab->Text = L"=";
//
// bc
//
this->bc->AutoSize = true;
this->bc->BackColor = System::Drawing::Color::Transparent;
this->bc->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->bc->ForeColor = System::Drawing::Color::Black;
this->bc->Location = System::Drawing::Point(124, 430);
this->bc->Name = L"bc";
this->bc->Size = System::Drawing::Size(21, 22);
this->bc->TabIndex = 55;
this->bc->Text = L"=";
//
// ac
//
this->ac->AutoSize = true;
this->ac->BackColor = System::Drawing::Color::Transparent;
this->ac->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->ac->ForeColor = System::Drawing::Color::Black;
this->ac->Location = System::Drawing::Point(146, 302);
this->ac->Name = L"ac";
this->ac->Size = System::Drawing::Size(21, 22);
this->ac->TabIndex = 56;
this->ac->Text = L"=";
//

```

```

// abN
//
this->abN->BackColor = System::Drawing::Color::Transparent;
this->abN->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"abN.BackgroundImage")));
this->abN->Location = System::Drawing::Point(290, 228);
this->abN->Name = L"abN";
this->abN->Size = System::Drawing::Size(203, 183);
this->abN->TabIndex = 57;
this->abN->TabStop = false;
this->abN->Visible = false;
//
// fa
//
this->fa->AutoSize = true;
this->fa->BackColor = System::Drawing::Color::Transparent;
this->fa->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->fa->ForeColor = System::Drawing::Color::Black;
this->fa->Location = System::Drawing::Point(358, 401);
this->fa->Name = L"fa";
this->fa->Size = System::Drawing::Size(21, 22);
this->fa->TabIndex = 63;
this->fa->Text = L"=";
//
// s2
//
this->s2->AutoSize = true;
this->s2->BackColor = System::Drawing::Color::Transparent;
this->s2->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->s2->ForeColor = System::Drawing::Color::Black;
this->s2->Location = System::Drawing::Point(407, 364);
this->s2->Name = L"s2";
this->s2->Size = System::Drawing::Size(64, 22);
this->s2->TabIndex = 62;
this->s2->Text = L"99 + 5";
//
// s1
//
this->s1->AutoSize = true;
this->s1->BackColor = System::Drawing::Color::Transparent;
this->s1->Font = (gcnew System::Drawing::Font(L"Arial", 14,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->s1->ForeColor = System::Drawing::Color::Black;
this->s1->Location = System::Drawing::Point(407, 303);
this->s1->Name = L"s1";
this->s1->Size = System::Drawing::Size(64, 22);
this->s1->TabIndex = 61;
this->s1->Text = L"99 + 5";
//
// bcN
//
this->bcN->BackColor = System::Drawing::Color::Transparent;

```

```

        this->bcN->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"bcN.BackgroundImage")));
        this->bcN->Location = System::Drawing::Point(314, 269);
        this->bcN->Name = L"bcN";
        this->bcN->Size = System::Drawing::Size(131, 172);
        this->bcN->TabIndex = 64;
        this->bcN->TabStop = false;
        this->bcN->Visible = false;
        //
        // acN
        //
        this->acN->BackColor = System::Drawing::Color::Transparent;
        this->acN->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"acN.BackgroundImage")));
        this->acN->Location = System::Drawing::Point(362, 196);
        this->acN->Name = L"acN";
        this->acN->Size = System::Drawing::Size(203, 183);
        this->acN->TabIndex = 65;
        this->acN->TabStop = false;
        this->acN->Visible = false;
        //
        // pyth
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->ClientSize = System::Drawing::Size(492, 453);
        this->Controls->Add(this->fa);
        this->Controls->Add(this->s2);
        this->Controls->Add(this->s1);
        this->Controls->Add(this->ac);
        this->Controls->Add(this->bc);
        this->Controls->Add(this->ab);
        this->Controls->Add(this->button2);
        this->Controls->Add(this->button3);
        this->Controls->Add(this->label17);
        this->Controls->Add(this->label18);
        this->Controls->Add(this->panel7);
        this->Controls->Add(this->pictureBox1);
        this->Controls->Add(this->panel3);
        this->Controls->Add(this->acN);
        this->Controls->Add(this->bcN);
        this->Controls->Add(this->abN);
        this->ForeColor = System::Drawing::Color::Black;
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"pyth";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"Pythagoras Theorem Calculator";
        this->panel3->ResumeLayout(false);
        this->panel3->PerformLayout();

```

```

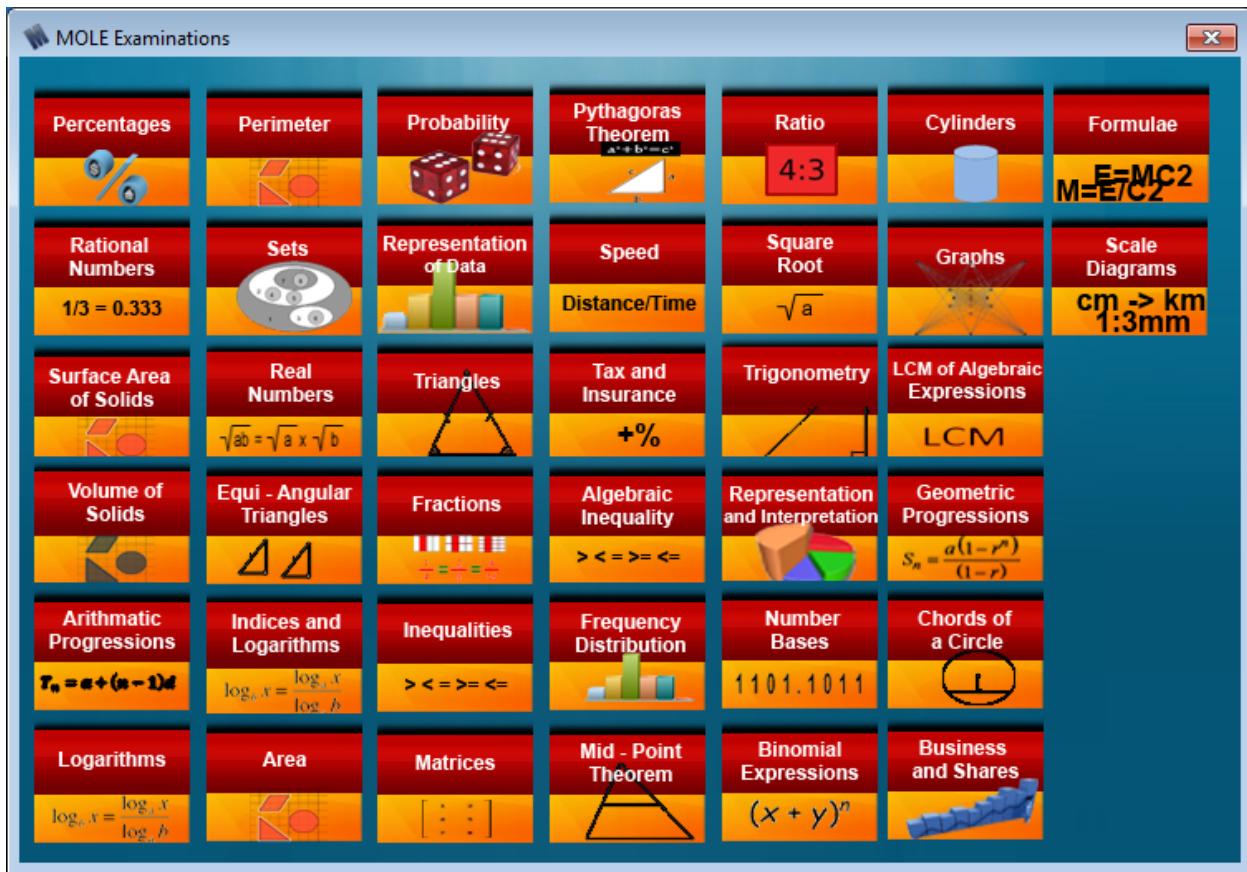
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox1))->EndInit();
        this->panel7->ResumeLayout(false);
        this->panel7->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>abN))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>bcN))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>acN))->EndInit();
        this->ResumeLayout(false);
        this->PerformLayout();

    }
#pragma endregion
    private: System::Void pictureBox1_Click(System::Object^ sender,
System::EventArgs^ e) {
    }
    Boolean detValues(TextBox^ a, TextBox^ b, TextBox^ c){
        if(a->Text != "" && b->Text != "" && c->Text != ""){
            try{
                if(a->Text == "?" && b->Text != "" && c->Text != ""){
                    setData("0",b->Text, c->Text);
                    ab->Text = a->Text;
                }else if(a->Text == "?" && b->Text != "" && c->Text != ""){
                    setData(a->Text,"0", c->Text);
                    bc->Text = b->Text;
                }else if(a->Text == "?" && b->Text != "" && c->Text != ""){
                    setData(a->Text,b->Text, "0");
                    ac->Text = c->Text;
                }
                return true;
            }catch(Exception^ ex){
                MessageBox::Show("Enter Only Numerical Values "+ex->Message, "MOLE Advisor");
                return false;
            }
        }else{
            MessageBox::Show("Enter Values for All Required Fields", "MOLE Advisor");
            return false;
        }
    }
    void setData(String^ x, String^ b, String^ c){
        a1 =Math::Pow(System::Convert::.ToDouble(x),2);
        b1 = Math::Pow(System::Convert::.ToDouble(b),2);
        c1=Math::Pow(System::Convert::.ToDouble(c),2);
    }
    void showP(PictureBox^ p){
        p->Location = System::Drawing::Point(290,228);
        p->Size = System::Drawing::Size(203, 183);
        p->Visible=true;
        p->BringToFront();
    }
    void detCal(){
        double eq;
        if(a1 == 0){
            eq = Math::Sqrt(c1 - b1);
            showP(abN);
        }else if(b1 == 0){

```

```
        eq = Math::Sqrt(c1 - a1);
        showP(bcN);
    }else if(c1 == 0){
        eq = Math::Sqrt(a1 + b1);
        showP(acN);
    }
}
double a1, b1, c1;
private: System::Void button3_Click(System::Object^  sender, System::EventArgs^  e) {
    if(detValues(a,b,c)){
        this->Size = System::Drawing::Size(508,492);
    }
}
};
```

ix. Examinations (mExams)



1. resource.h

```

//{{NO_DEPENDENCIES}}
// Microsoft Visual C++ generated include file.
// Used by mExams.rc
//
#define IDI_ICON1           101

// Next default values for new objects
//
#ifndef APSTUDIO_INVOKED
#ifndef APSTUDIO_READONLY_SYMBOLS
#define _APS_NEXT_RESOURCE_VALUE    102
#define _APS_NEXT_COMMAND_VALUE    40001
#define _APS_NEXT_CONTROL_VALUE    1001
#define _APS_NEXT_SYMED_VALUE      101
#endif
#endif

```

2. coreControls.h

```
//Never Change anything below for any reason. - Basura
#pragma once
#include "showR.h"
namespace mExams {
    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;

    public ref class Core{
private:
    Form^ f;
    Panel^ botP, ^topP, ^topP1;
    Label^ botP_L, ^topP1_L, ^topP2_L, ^topP3_L, ^topP4_L, ^topP1_1;
    Button^ botP_B, ^topP_B, ^topB1_1, ^topB1_2;
    int count; //Total Time
    int h,m,s; //Timer Variables
    String^ path, ^name, ^sName;
    Timer^ tim;
public:
    array< RadioButton^ >^ aSet;

    int total; //Total Marks
    void showD(String^ a, String^ b){
        StreamWriter^ sw = gcnew StreamWriter(path-
>Replace("mExams.exe", "config.ms"));
        sw->WriteLine("ETYPE = "+a);
        sw->WriteLine("FILE = user//"+b);
        sw->Close();
        System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("mExams.exe", "mCore.exe"))->WaitForExit();
    }
    Core(String^ a, Form^ b, String^ c){
        try{
            aSet= gcnew array< RadioButton^ >(10);
            path=Application::ExecutablePath;
            showD("D", "exams.ms");
            f=b;
            name=a;
            sName=c;
            createControls();
            readEData();
            showD("E", "exams.ms");
        }catch(Exception^ e){
            MessageBox::Show("We Encountered a Problem. " + e->Message + "
Try reinstalling the Application");
        }
    }
    ~Core(){}
}

void createControls(){
```

```

f->BackgroundImage=System::Drawing::Image::FromFile(path-
>Replace("mExams.exe", "core\\bacm.mi"));
f->Text=name;
//Timer - Start
tim = (gcnew System::Windows::Forms::Timer);
tim->Interval = 1000;
tim->Enabled=false;
tim->Tick += gcnew System::EventHandler(this, &Core::tim_Tick);
//Timer - End

//Bottom Panel - Start
botP_L=(gcnew System::Windows::Forms::Label());
botP_L->BackColor = System::Drawing::Color::Transparent;
botP_L->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
botP_L->ForeColor = System::Drawing::Color::Black;
botP_L->Location = System::Drawing::Point(11, 12);
botP_L->Name = L"botP_L";
botP_L->Size = System::Drawing::Size(348, 15);
botP_L->TabIndex = 29;
botP_L->Text = L"Always try, never leave any question unanswered";

botP_B=(gcnew System::Windows::Forms::Button());
botP_B->BackColor = System::Drawing::Color::Transparent;
botP_B->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
botP_B->Cursor = System::Windows::Forms::Cursors::Hand;
botP_B->Dock = System::Windows::Forms::DockStyle::Right;
botP_B->FlatAppearance->BorderSize = 0;
botP_B->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
botP_B->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
botP_B->ForeColor = System::Drawing::Color::White;
botP_B->Image = System::Drawing::Image::FromFile(path-
>Replace("mExams.exe", "core\\buttonback.mi"));
botP_B->ImageAlign =
System::Drawing::ContentAlignment::BottomCenter;
botP_B->Location = System::Drawing::Point(509, 0);
botP_B->Name = L"button1";
botP_B->Size = System::Drawing::Size(112, 40);
botP_B->TabIndex = 357;
botP_B->Text = L"Hand Over Exam Paper";
botP_B-> TextAlign = System::Drawing::ContentAlignment::BottomCenter;
botP_B->UseVisualStyleBackColor = false;
botP_B->Click += gcnew System::EventHandler(this,
&Core::botP_B_Click);

botP=(gcnew System::Windows::Forms::Panel());
botP->BackColor = System::Drawing::Color::Black;
botP->BackgroundImage = System::Drawing::Image::FromFile(path-
>Replace("mExams.exe", "core\\bacm1.mi"));
botP->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
botP->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
botP->Controls->Add(botP_B);

```

```

botP->Controls->Add(botP_L);
botP->Dock = System::Windows::Forms::DockStyle::Bottom;
botP->Location = System::Drawing::Point(0, 405);
botP->Name = L"botP";
botP->Size = System::Drawing::Size(623, 42);
botP->TabIndex = 7;
botP->Visible = false;
f->Controls->Add(botP);
//Bottom Panel - End

//Top Panel - Start
topP1_L= (gcnew System::Windows::Forms::Label());
topP1_L->BackColor = System::Drawing::Color::Transparent;
topP1_L->Dock = System::Windows::Forms::DockStyle::Top;
topP1_L->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
topP1_L->Location = System::Drawing::Point(0, 0);
topP1_L->Name = "topP1_L";
topP1_L->Size = System::Drawing::Size(514, 35);
topP1_L->TabIndex = 1;
topP1_L->Text = name;
topP1_L-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

topP2_L= (gcnew System::Windows::Forms::Label());
topP2_L->BackColor = System::Drawing::Color::Teal;
topP2_L->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
topP2_L->ForeColor = System::Drawing::Color::White;
topP2_L->Location = System::Drawing::Point(0, 35);
topP2_L->Name = L"topP2_L";
topP2_L->Size = System::Drawing::Size(414, 23);
topP2_L->TabIndex = 2;
topP2_L->Text = "Your Examination Progress";
topP2_L-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

topP3_L = (gcnew System::Windows::Forms::Label());
topP3_L->BackColor = System::Drawing::Color::Gold;
topP3_L->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
topP3_L->Location = System::Drawing::Point(0, 59);
topP3_L->Name = L"topP3_L";
topP3_L->Size = System::Drawing::Size(414, 25);
topP3_L->TabIndex = 3;
topP3_L->Text = L"Current Exam Progress = 100" Last
Exam Progress = 100";
topP3_L-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

topP4_L = (gcnew System::Windows::Forms::Label());
topP4_L->BackColor = System::Drawing::Color::Maroon;
topP4_L->Dock = System::Windows::Forms::DockStyle::Right;

```

```

        topP4_L->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
        topP4_L->ForeColor = System::Drawing::Color::White;
        topP4_L->Location = System::Drawing::Point(408, 35);
        topP4_L->Name = L"topP4_L";
        topP4_L->Size = System::Drawing::Size(106, 47);
        topP4_L->TabIndex = 358;
        topP4_L->Text = "Time: 0:30:00";
        topP4_L-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        topP4_L->BringToFront();
f->Controls->Add(topP4_L);

        topP_B = (gcnew System::Windows::Forms::Button());
        topP_B->BackColor = System::Drawing::Color::Transparent;
        topP_B->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
        topP_B->Cursor = System::Windows::Forms::Cursors::Hand;
        topP_B->Dock = System::Windows::Forms::DockStyle::Right;
        topP_B->FlatAppearance->BorderSize = 0;
        topP_B->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        topP_B->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
        topP_B->ForeColor = System::Drawing::Color::White;
        topP_B->Image = System::Drawing::Image::FromFile(path-
>Replace("mExams.exe", "core\buttonback1.mi"));
        topP_B->ImageAlign = System::Drawing::ContentAlignment::TopLeft;
        topP_B->Location = System::Drawing::Point(514, 0);
        topP_B->Name = L"topP_B";
        topP_B->Size = System::Drawing::Size(103, 82);
        topP_B->TabIndex = 356;
        topP_B->Text = "Start Examination";
        topP_B-> TextAlign = System::Drawing::ContentAlignment::BottomCenter;
        topP_B->UseVisualStyleBackColor = false;
        topP_B->Click += gcnew System::EventHandler(this,
&Core::topP_B_Click);

        topP = (gcnew System::Windows::Forms::Panel());
        topP->BackColor = System::Drawing::Color::DodgerBlue;
        topP->BackgroundImage = System::Drawing::Image::FromFile(path-
>Replace("mExams.exe", "core\bacm1.mi"));
        topP->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        topP->Controls->Add(topP1_L);
        topP->Controls->Add(topP4_L);
        topP->Controls->Add(topP2_L);

        topP->Controls->Add(topP3_L);
        topP->Controls->Add(topP_B);
        topP->Location = System::Drawing::Point(0, 0);
        topP->Name = L"topP";
        topP->Size = System::Drawing::Size(617, 82);
        topP->TabIndex = 6;
f->Controls->Add(topP);

```

```

topP1_1 = (gcnew System::Windows::Forms::Label());
topP1_1->BackColor = System::Drawing::Color::DarkSlateGray;
topP1_1->Dock = System::Windows::Forms::DockStyle::Top;
topP1_1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
topP1_1->ForeColor = System::Drawing::Color::White;
topP1_1->Location = System::Drawing::Point(0, 0);
topP1_1->Name = L"topP1_1";
topP1_1->Size = System::Drawing::Size(291, 40);
topP1_1->TabIndex = 12;
topP1_1->Text = L"Once the examination started you cannot quit, Are
you ready to start the examinat"
    L"ion\?";
    topP1_1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

topB1_1 = (gcnew System::Windows::Forms::Button());
topB1_1->BackgroundImage = System::Drawing::Image::FromFile(path-
>Replace("mExams.exe", "core\bacm1.mi"));
topB1_1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
topB1_1->Cursor = System::Windows::Forms::Cursors::Hand;
topB1_1->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
topB1_1->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold,
System::Drawing::GraphicsUnit::Point, static_cast<System::Byte>(0)));
topB1_1->ForeColor = System::Drawing::Color::White;
topB1_1->Location = System::Drawing::Point(31, 45);
topB1_1->Name = L"topB1_1";
topB1_1->Size = System::Drawing::Size(143, 23);
topB1_1->TabIndex = 14;
topB1_1->Text = L"YES";
topB1_1->UseVisualStyleBackColor = true;
topB1_1->Click += gcnew System::EventHandler(this,
&Core::topB1_1_Click);

topB1_2 = (gcnew System::Windows::Forms::Button());
topB1_2->BackColor = System::Drawing::Color::Maroon;
topB1_2->Cursor = System::Windows::Forms::Cursors::Hand;
topB1_2->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
topB1_2->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
topB1_2->ForeColor = System::Drawing::Color::White;
topB1_2->Location = System::Drawing::Point(180, 45);
topB1_2->Name = L"topB1_2";
topB1_2->Size = System::Drawing::Size(143, 23);
topB1_2->TabIndex = 13;
topB1_2->Text = L"NO";
topB1_2->UseVisualStyleBackColor = false;
topB1_2->Click += gcnew System::EventHandler(this,
&Core::topB1_2_Click);

topP1 = (gcnew System::Windows::Forms::Panel());

```

```

        topP1->BackgroundImage = System::Drawing::Image::FromFile(path-
>Replace("mExams.exe", "core\bacm1.mi"));
        topP1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        topP1->Controls->Add(topB1_1);
        topP1->Controls->Add(topB1_2);
        topP1->Controls->Add(topP1_1);
        topP1->Location = System::Drawing::Point(280, 4);
        topP1->Name = L"topP1";
        topP1->Size = System::Drawing::Size(113, 79);
        topP1->TabIndex = 9;
        topP1->Visible = false;
f->Controls->Add(topP1);
//Top Panel - End
}
Void topB1_2_Click(System::Object^ sender, System::EventArgs^ e) {
    topP1->Visible=false;
}
Void topB1_1_Click(System::Object^ sender, System::EventArgs^ e) {
    showExam();
}
Void topP_B_Click(System::Object^ sender, System::EventArgs^ e) {
    topP1->Visible = true;
    topP1->Location=System::Drawing::Point(152,4);
    topP1->Size=System::Drawing::Size(357,79);
    topP1->BringToFront();
}
Void tim_Tick(System::Object^ sender, System::EventArgs^ e) {
    timFun();
}

Void botP_B_Click(System::Object^ sender, System::EventArgs^ e) {
    checkAnswer();
    showR srr;
    srr.ename->Text=name;
    srr.score->Text=System::Convert::ToString(total);
    srr.ShowDialog();
}

void readEData(){
try{
    f->Size=System::Drawing::Size(633, 125);
    StreamReader^ sr = gcnew StreamReader(path-
>Replace("mExams.exe", "user\exams.ms"));
    int te= System::Convert::ToInt16(sr->ReadLine()-
>Substring(5));
    String^ readF;
    int cm=500,lm=500;
    sr->ReadLine();
    while(!sr->EndOfStream){
        readF = sr->ReadLine();
        if(readF->StartsWith("Name")){
            if(sName == readF->Substring(7)){
                cm = System::Convert::ToInt16(sr-
>ReadLine()->Substring(8));
                lm = System::Convert::ToInt16(sr-
>ReadLine()->Substring(8));
            }
        }
    }
}
}

```

```

        }
        te--;
    }
    if(cm==500){
        cm=0;
        lm=0;
    }
    topP3_L->Text="Current Exam Progress = "+cm+
+"Last Exam Progress = "+lm;
    sr->Close();
}catch (System::Exception^ e){
    MessageBox::Show("We Encountered a Problem. " + e->Message + "
Try reinstalling the Application");
}
}

void timFun(){
    if(count == 900000){
        botP->Visible=true;
        f->Height=f->Height+botP->Height;
    }
    s--;
    if(s==0){
        s=59;
        m--;
    }
    if(m==0){
        tim->Enabled=false;
    }
    count+=1000;
    topP4_L->Text=h+":" +m+ ":" +s;
}

void showExam(){
    f->Size=System::Drawing::Size(629, 510);
    f->Height=f->Height-botP->Height;
    topP_B->Text="Exam in Progress";
    topP_B->Enabled=false;
    topP1->Visible=false;
    f->ControlBox=false;
    tim->Enabled=true;
    count=1000;
    h=0;
    m=30;
    s=59;
}

void checkAnswer(){
    if(aSet[0]->Checked){
        total+=10;
    }
    if(aSet[1]->Checked){
        total+=10;
    }
    if(aSet[2]->Checked){
        total+=10;
    }
    if(aSet[3]->Checked){
        total+=10;
    }
    if(aSet[4]->Checked){

```

```

        total+=10;
    }
    if(aSet[5]->Checked){
        total+=10;
    }
    if(aSet[6]->Checked){
        total+=10;
    }
    if(aSet[7]->Checked){
        total+=10;
    }
    if(aSet[8]->Checked){
        total+=10;
    }
    if(aSet[9]->Checked){
        total+=10;
    }
    if(total>=40){
        WriteExam2File(sName, System::Convert::ToString(total), "P");
    }else{
        WriteExam2File(sName, System::Convert::ToString(total), "F");
    }
    showD("E", "examdone.ms");
}
void WriteExam2File(String^ a, String^ b, String^ c){
    try{
        //a - Exam Name
        //b - Mark
        //c - Status(P/F)
        if(!IO::File::Exists(path-
>Replace("mExams.exe", "user\\examdone.ms"))){
            IO::File::WriteAllText(path-
>Replace("mExams.exe", "user\\examdone.ms"), "PA pu pa aa ee bas13 E pu aae ruu pa bas13
Bas bas13 ma
"+Environment::NewLine+Environment::NewLine+Environment::NewLine+Environment::NewLine);
        }
        showD("D", "examdone.ms");
        TextBox^ baseText = (gcnew System::Windows::Forms::TextBox());
        baseText->Visible=false;
        baseText->Text="";
        StreamReader^ sr1 = gcnew StreamReader( path-
>Replace("mExams.exe", "user\\examdone.ms"));
        int count = System::Convert::ToInt16(sr1->ReadLine()-
>Substring(13)) +1;
        baseText->Text = "Total Count = "+
System::Convert::ToString(count);
        while(!sr1->EndOfStream){
            if(sr1->ReadLine() != ""){
                baseText->Text=baseText-
>Text+Environment::NewLine+sr1->ReadLine();
            }
            count--;
        }
        sr1->Close();
        baseText->Text=baseText->Text+Environment::NewLine+"Name =
"+a+Environment::NewLine;
        baseText->Text=baseText->Text+"Mark =
"+b+Environment::NewLine;
    }
}

```

```
baseText->Text=baseText->Text+"Status = "+c;
StreamWriter^ sw = gcnew StreamWriter( path-
>Replace("mExams.exe", "user\\examdone.ms"));
sw->WriteLine(baseText->Text);
sw->Close();
}catch (System::Exception^ e){
    MessageBox::Show("We Encountered a Problem. " + e-
>Message + " Try reinstalling the Application");
}
};

}
```

3. apE.cpp (Arithmetic Progressions)

The screenshots show the progression of an examination. The first screenshot shows the initial setup with a progress bar at 0% and a timer of 0:30:00. The second screenshot shows a confirmation dialog asking if the user is ready to start the examination. The third screenshot shows the examination interface with three questions (Q1, Q2, Q3) and their respective answer options.

Screenshot 1: Initial Examination Setup

Arithmetic Progressions		X
Arithmetic Progressions		
Your Examination Progress		Time: 0:30:00
Current Exam Progress = 0	Last Exam Progress = 0	Start Examination

Screenshot 2: Confirmation Dialog

Once the examination started you cannot quit, Are you ready to start the examination?

YES NO Start Examination

Screenshot 3: Examination Interface

Arithmetic Progressions

Your Examination Progress

Current Exam Progress = 0 Last Exam Progress = 0 0:30:52 Exam in Progress

Find the 6th term of the arithmetic progression: 5,8,11,...

Q1

A) 45 C) 13
B) 5 D) 20

The first 4 values of the progression having $a=7$ and $d=2$ is,

Q2

A) 4,6,8,10 C) 7,14,21,28
B) 7,9,11,13 D) 7,12,17,22

An arithmetic progression has a common difference of 4.5 and its 7th term is -85, what are its first and 3rd terms?

Q3

A) 67,-85 C) -67,-85
B) -112,-94 D) 94,112

The arithmetic mean of 56 and -94 is,

```
#include "apE.h"
```

4. apE.h (Arithmetic Progressions)

```
#pragma once
#include "CoreControls.h"

namespace mExams {

    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;

    /// <summary>
    /// Summary for apE
    /// </summary>
    public ref class apE : public System::Windows::Forms::Form
    {
public:
    Core ^ core;
    apE(void)
    {
        InitializeComponent();
        core= gcnew Core("Arithmatic Progressions", this,"ap");
        setAnswer();
    }

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

protected:

internal:

private: System::Windows::Forms::ToolTip^ ttip;
private: System::Windows::Forms::Panel^ panel1;
internal: System::Windows::Forms::Panel^ panel7;
private:
private: System::Windows::Forms::RadioButton^ q10d;
internal:
private: System::Windows::Forms::RadioButton^ q10b;
private: System::Windows::Forms::RadioButton^ q10c;
private: System::Windows::Forms::RadioButton^ q10a;
private: System::Windows::Forms::Label^ label20;
private: System::Windows::Forms::Label^ label21;
internal: System::Windows::Forms::Panel^ panel9;
```

```
private:  
private: System::Windows::Forms::RadioButton^ q9d;  
internal:  
private: System::Windows::Forms::RadioButton^ q9b;  
private: System::Windows::Forms::RadioButton^ q9c;  
private: System::Windows::Forms::RadioButton^ q9a;  
private: System::Windows::Forms::Label^ label18;  
private: System::Windows::Forms::Label^ label19;  
internal: System::Windows::Forms::Panel^ panel10;  
private:  
private: System::Windows::Forms::RadioButton^ q8d;  
internal:  
private: System::Windows::Forms::RadioButton^ q8b;  
private: System::Windows::Forms::RadioButton^ q8c;  
private: System::Windows::Forms::RadioButton^ q8a;  
private: System::Windows::Forms::Label^ label16;  
private: System::Windows::Forms::Label^ label17;  
internal: System::Windows::Forms::Panel^ panel11;  
private:  
private: System::Windows::Forms::RadioButton^ q7d;  
internal:  
private: System::Windows::Forms::RadioButton^ q7b;  
private: System::Windows::Forms::RadioButton^ q7c;  
private: System::Windows::Forms::RadioButton^ q7a;  
private: System::Windows::Forms::Label^ label14;  
private: System::Windows::Forms::Label^ label15;  
internal: System::Windows::Forms::Panel^ panel12;  
private:  
private: System::Windows::Forms::RadioButton^ q6d;  
internal:  
private: System::Windows::Forms::RadioButton^ q6b;  
private: System::Windows::Forms::RadioButton^ q6c;  
private: System::Windows::Forms::RadioButton^ q6a;  
private: System::Windows::Forms::Label^ label12;  
private: System::Windows::Forms::Label^ label13;  
internal: System::Windows::Forms::Panel^ panel18;  
private:  
private: System::Windows::Forms::RadioButton^ q5d;  
internal:  
private: System::Windows::Forms::RadioButton^ q5b;  
private: System::Windows::Forms::RadioButton^ q5c;  
private: System::Windows::Forms::RadioButton^ q5a;  
private: System::Windows::Forms::Label^ label10;  
private: System::Windows::Forms::Label^ label11;  
internal: System::Windows::Forms::Panel^ panel6;  
private:  
private: System::Windows::Forms::RadioButton^ q4d;  
internal:  
private: System::Windows::Forms::RadioButton^ q4b;  
private: System::Windows::Forms::RadioButton^ q4c;  
private: System::Windows::Forms::RadioButton^ q4a;  
private: System::Windows::Forms::Label^ label7;  
private: System::Windows::Forms::Label^ label8;  
internal: System::Windows::Forms::Panel^ panel5;  
private:  
private: System::Windows::Forms::RadioButton^ q3d;  
internal:  
private: System::Windows::Forms::RadioButton^ q3b;
```

```
private: System::Windows::Forms::RadioButton^ q3c;
private: System::Windows::Forms::RadioButton^ q3a;
private: System::Windows::Forms::Label^ label5;
private: System::Windows::Forms::Label^ label6;
internal: System::Windows::Forms::Panel^ panel4;
private:
private: System::Windows::Forms::RadioButton^ q2d;
internal:
private: System::Windows::Forms::RadioButton^ q2b;
private: System::Windows::Forms::RadioButton^ q2c;
private: System::Windows::Forms::RadioButton^ q2a;
private: System::Windows::Forms::Label^ label3;
private: System::Windows::Forms::Label^ label4;
internal: System::Windows::Forms::Panel^ panel2;
private:
private: System::Windows::Forms::RadioButton^ q1d;
internal:
private: System::Windows::Forms::RadioButton^ q1b;
private: System::Windows::Forms::RadioButton^ q1c;
private: System::Windows::Forms::RadioButton^ q1a;
private: System::Windows::Forms::Label^ label2;
private: System::Windows::Forms::Label^ label1;

private:
private:
private:
internal:
internal:
private:
private:
internal:
internal:
private:
internal:
private:
internal:
private:
internal:
internal:
internal:
internal:
internal:
internal:
internal:
internal:
```

```

internal:
private:

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

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(apE::typeid));
        this->tTip = (gcnew System::Windows::Forms::ToolTip(this-
>components));

        this->panel1 = (gcnew System::Windows::Forms::Panel());
        this->panel7 = (gcnew System::Windows::Forms::Panel());
        this->q10d = (gcnew System::Windows::Forms::RadioButton());
        this->q10b = (gcnew System::Windows::Forms::RadioButton());
        this->q10c = (gcnew System::Windows::Forms::RadioButton());
        this->q10a = (gcnew System::Windows::Forms::RadioButton());
        this->label20 = (gcnew System::Windows::Forms::Label());
        this->label21 = (gcnew System::Windows::Forms::Label());
        this->panel9 = (gcnew System::Windows::Forms::Panel());
        this->q9d = (gcnew System::Windows::Forms::RadioButton());
        this->q9b = (gcnew System::Windows::Forms::RadioButton());
        this->q9c = (gcnew System::Windows::Forms::RadioButton());
        this->q9a = (gcnew System::Windows::Forms::RadioButton());
        this->label18 = (gcnew System::Windows::Forms::Label());
        this->label19 = (gcnew System::Windows::Forms::Label());
        this->panel10 = (gcnew System::Windows::Forms::Panel());
        this->q8d = (gcnew System::Windows::Forms::RadioButton());
        this->q8b = (gcnew System::Windows::Forms::RadioButton());
        this->q8c = (gcnew System::Windows::Forms::RadioButton());
        this->q8a = (gcnew System::Windows::Forms::RadioButton());
        this->label16 = (gcnew System::Windows::Forms::Label());
        this->label17 = (gcnew System::Windows::Forms::Label());
        this->panel11 = (gcnew System::Windows::Forms::Panel());
        this->q7d = (gcnew System::Windows::Forms::RadioButton());
        this->q7b = (gcnew System::Windows::Forms::RadioButton());
        this->q7c = (gcnew System::Windows::Forms::RadioButton());
        this->q7a = (gcnew System::Windows::Forms::RadioButton());
        this->label14 = (gcnew System::Windows::Forms::Label());
        this->label15 = (gcnew System::Windows::Forms::Label());
        this->panel12 = (gcnew System::Windows::Forms::Panel());
        this->q6d = (gcnew System::Windows::Forms::RadioButton());
        this->q6b = (gcnew System::Windows::Forms::RadioButton());
        this->q6c = (gcnew System::Windows::Forms::RadioButton());

```

```

this->q6a = (gcnew System::Windows::Forms::RadioButton());
this->label12 = (gcnew System::Windows::Forms::Label());
this->label13 = (gcnew System::Windows::Forms::Label());
this->panel8 = (gcnew System::Windows::Forms::Panel());
this->q5d = (gcnew System::Windows::Forms::RadioButton());
this->q5b = (gcnew System::Windows::Forms::RadioButton());
this->q5c = (gcnew System::Windows::Forms::RadioButton());
this->q5a = (gcnew System::Windows::Forms::RadioButton());
this->label10 = (gcnew System::Windows::Forms::Label());
this->label11 = (gcnew System::Windows::Forms::Label());
this->panel6 = (gcnew System::Windows::Forms::Panel());
this->q4d = (gcnew System::Windows::Forms::RadioButton());
this->q4b = (gcnew System::Windows::Forms::RadioButton());
this->q4c = (gcnew System::Windows::Forms::RadioButton());
this->q4a = (gcnew System::Windows::Forms::RadioButton());
this->label7 = (gcnew System::Windows::Forms::Label());
this->label8 = (gcnew System::Windows::Forms::Label());
this->panel5 = (gcnew System::Windows::Forms::Panel());
this->q3d = (gcnew System::Windows::Forms::RadioButton());
this->q3b = (gcnew System::Windows::Forms::RadioButton());
this->q3c = (gcnew System::Windows::Forms::RadioButton());
this->q3a = (gcnew System::Windows::Forms::RadioButton());
this->label5 = (gcnew System::Windows::Forms::Label());
this->label6 = (gcnew System::Windows::Forms::Label());
this->panel4 = (gcnew System::Windows::Forms::Panel());
this->q2d = (gcnew System::Windows::Forms::RadioButton());
this->q2b = (gcnew System::Windows::Forms::RadioButton());
this->q2c = (gcnew System::Windows::Forms::RadioButton());
this->q2a = (gcnew System::Windows::Forms::RadioButton());
this->label3 = (gcnew System::Windows::Forms::Label());
this->label4 = (gcnew System::Windows::Forms::Label());
this->panel2 = (gcnew System::Windows::Forms::Panel());
this->q1d = (gcnew System::Windows::Forms::RadioButton());
this->q1b = (gcnew System::Windows::Forms::RadioButton());
this->q1c = (gcnew System::Windows::Forms::RadioButton());
this->q1a = (gcnew System::Windows::Forms::RadioButton());
this->label2 = (gcnew System::Windows::Forms::Label());
this->label1 = (gcnew System::Windows::Forms::Label());
this->panel1->SuspendLayout();
this->panel7->SuspendLayout();
this->panel9->SuspendLayout();
this->panel10->SuspendLayout();
this->panel11->SuspendLayout();
this->panel12->SuspendLayout();
this->panel8->SuspendLayout();
this->panel6->SuspendLayout();
this->panel5->SuspendLayout();
this->panel4->SuspendLayout();
this->panel2->SuspendLayout();
this->SuspendLayout();
// 
// ttip
// 
this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
this->ttip->ForeColor = System::Drawing::Color::White;
this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
this->ttip->ToolTipTitle = L"MOLE Advisor";
// 

```

```

// panel1
//
this->panel1->AutoScroll = true;
this->panel1->BackColor = System::Drawing::Color::White;
this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
this->panel1->Controls->Add(this->panel17);
this->panel1->Controls->Add(this->panel19);
this->panel1->Controls->Add(this->panel10);
this->panel1->Controls->Add(this->panel11);
this->panel1->Controls->Add(this->panel12);
this->panel1->Controls->Add(this->panel18);
this->panel1->Controls->Add(this->panel16);
this->panel1->Controls->Add(this->panel15);
this->panel1->Controls->Add(this->panel14);
this->panel1->Controls->Add(this->panel12);
this->panel1->Location = System::Drawing::Point(3, 88);
this->panel1->Name = L"panel1";
this->panel1->Size = System::Drawing::Size(611, 338);
this->panel1->TabIndex = 10;
//
// panel7
//
this->panel7->BackColor = System::Drawing::Color::Transparent;
this->panel7->Controls->Add(this->q10d);
this->panel7->Controls->Add(this->q10b);
this->panel7->Controls->Add(this->q10c);
this->panel7->Controls->Add(this->q10a);
this->panel7->Controls->Add(this->label20);
this->panel7->Controls->Add(this->label21);
this->panel7->Dock = System::Windows::Forms::DockStyle::Top;
this->panel7->Location = System::Drawing::Point(0, 923);
this->panel7->Name = L"panel7";
this->panel7->Size = System::Drawing::Size(594, 100);
this->panel7->TabIndex = 18;
//
// q10d
//
this->q10d->AutoSize = true;
this->q10d->BackColor = System::Drawing::Color::Transparent;
this->q10d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q10d->Location = System::Drawing::Point(285, 65);
this->q10d->Name = L"q10d";
this->q10d->Size = System::Drawing::Size(74, 20);
this->q10d->TabIndex = 11;
this->q10d->TabStop = true;
this->q10d->Text = L"D) 4,649";
this->q10d->UseVisualStyleBackColor = false;
//
// q10b
//
this->q10b->AutoSize = true;
this->q10b->BackColor = System::Drawing::Color::Transparent;

```

```

this->q10b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10b->Location = System::Drawing::Point(126, 66);
this->q10b->Name = L"q10b";
this->q10b->Size = System::Drawing::Size(74, 20);
this->q10b->TabIndex = 10;
this->q10b->TabStop = true;
this->q10b->Text = L"B) 3,713";
this->q10b->UseVisualStyleBackColor = false;
//
// q10c
//
this->q10c->AutoSize = true;
this->q10c->BackColor = System::Drawing::Color::Transparent;
this->q10c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10c->Location = System::Drawing::Point(285, 45);
this->q10c->Name = L"q10c";
this->q10c->Size = System::Drawing::Size(74, 20);
this->q10c->TabIndex = 9;
this->q10c->TabStop = true;
this->q10c->Text = L"C) 2,436";
this->q10c->UseVisualStyleBackColor = false;
//
// q10a
//
this->q10a->AutoSize = true;
this->q10a->BackColor = System::Drawing::Color::Transparent;
this->q10a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10a->Location = System::Drawing::Point(126, 46);
this->q10a->Name = L"q10a";
this->q10a->Size = System::Drawing::Size(74, 20);
this->q10a->TabIndex = 8;
this->q10a->TabStop = true;
this->q10a->Text = L"A) 2,652";
this->q10a->UseVisualStyleBackColor = false;
//
// label20
//
this->label20->BackColor = System::Drawing::Color::DarkSlateGray;
this->label20->Dock = System::Windows::Forms::DockStyle::Top;
this->label20->ForeColor = System::Drawing::Color::Black;
this->label20->Location = System::Drawing::Point(41, 0);
this->label20->Name = L"label20";
this->label20->Size = System::Drawing::Size(553, 37);
this->label20->TabIndex = 7;
this->label20->Text = L"What's the sum of the first 51 even
numbers?" ;

```

```

    this->label20->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
// label21
//
this->label21->BackColor = System::Drawing::Color::DarkSlateGray;
this->label21->Dock = System::Windows::Forms::DockStyle::Left;
this->label21->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label21->ForeColor = System::Drawing::Color::White;
this->label21->Location = System::Drawing::Point(0, 0);
this->label21->Name = L"label21";
this->label21->Size = System::Drawing::Size(41, 100);
this->label21->TabIndex = 6;
this->label21->Text = L"Q10";
this->label21-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
// panel9
//
this->panel9->BackColor = System::Drawing::Color::Transparent;
this->panel9->Controls->Add(this->q9d);
this->panel9->Controls->Add(this->q9b);
this->panel9->Controls->Add(this->q9c);
this->panel9->Controls->Add(this->q9a);
this->panel9->Controls->Add(this->label18);
this->panel9->Controls->Add(this->label19);
this->panel9->Dock = System::Windows::Forms::DockStyle::Top;
this->panel9->Location = System::Drawing::Point(0, 800);
this->panel9->Name = L"panel9";
this->panel9->Size = System::Drawing::Size(594, 123);
this->panel9->TabIndex = 17;
    //
// q9d
//
this->q9d->AutoSize = true;
this->q9d->BackColor = System::Drawing::Color::Transparent;
this->q9d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q9d->Location = System::Drawing::Point(285, 85);
this->q9d->Name = L"q9d";
this->q9d->Size = System::Drawing::Size(93, 20);
this->q9d->TabIndex = 11;
this->q9d->TabStop = true;
this->q9d->Text = L"D) 78.89km";
this->q9d->UseVisualStyleBackColor = false;
    //
// q9b
//
this->q9b->AutoSize = true;
this->q9b->BackColor = System::Drawing::Color::Transparent;
this->q9b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;

```

```

    this->q9b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->q9b->Location = System::Drawing::Point(126, 86);
    this->q9b->Name = L"q9b";
    this->q9b->Size = System::Drawing::Size(95, 20);
    this->q9b->TabIndex = 10;
    this->q9b->TabStop = true;
    this->q9b->Text = L"B) 6.874Km";
    this->q9b->UseVisualStyleBackColor = false;
    //
    // q9c
    //
    this->q9c->AutoSize = true;
    this->q9c->BackColor = System::Drawing::Color::Transparent;
    this->q9c->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q9c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q9c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->q9c->Location = System::Drawing::Point(285, 65);
    this->q9c->Name = L"q9c";
    this->q9c->Size = System::Drawing::Size(82, 20);
    this->q9c->TabIndex = 9;
    this->q9c->TabStop = true;
    this->q9c->Text = L"C) 1248m";
    this->q9c->UseVisualStyleBackColor = false;
    //
    // q9a
    //
    this->q9a->AutoSize = true;
    this->q9a->BackColor = System::Drawing::Color::Transparent;
    this->q9a->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q9a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q9a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->q9a->Location = System::Drawing::Point(126, 66);
    this->q9a->Name = L"q9a";
    this->q9a->Size = System::Drawing::Size(95, 20);
    this->q9a->TabIndex = 8;
    this->q9a->TabStop = true;
    this->q9a->Text = L"A) 6.988Km";
    this->q9a->UseVisualStyleBackColor = false;
    //
    // label18
    //
    this->label18->BackColor = System::Drawing::Color::DarkSlateGray;
    this->label18->Dock = System::Windows::Forms::DockStyle::Top;
    this->label18->ForeColor = System::Drawing::Color::Black;
    this->label18->Location = System::Drawing::Point(41, 0);
    this->label18->Name = L"label18";
    this->label18->Size = System::Drawing::Size(553, 51);
    this->label18->TabIndex = 7;
    this->label18->Text = resources->GetString(L"label18.Text");
    this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //

```

```

// label19
//
this->label19->BackColor = System::Drawing::Color::DarkSlateGray;
this->label19->Dock = System::Windows::Forms::DockStyle::Left;
this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label19->ForeColor = System::Drawing::Color::White;
this->label19->Location = System::Drawing::Point(0, 0);
this->label19->Name = L"label19";
this->label19->Size = System::Drawing::Size(41, 123);
this->label19->TabIndex = 6;
this->label19->Text = L"Q9";
this->label19-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel10
//
this->panel10->BackColor = System::Drawing::Color::Transparent;
this->panel10->Controls->Add(this->q8d);
this->panel10->Controls->Add(this->q8b);
this->panel10->Controls->Add(this->q8c);
this->panel10->Controls->Add(this->q8a);
this->panel10->Controls->Add(this->label16);
this->panel10->Controls->Add(this->label17);
this->panel10->Dock = System::Windows::Forms::DockStyle::Top;
this->panel10->Location = System::Drawing::Point(0, 700);
this->panel10->Name = L"panel10";
this->panel10->Size = System::Drawing::Size(594, 100);
this->panel10->TabIndex = 16;
//
// q8d
//
this->q8d->AutoSize = true;
this->q8d->BackColor = System::Drawing::Color::Transparent;
this->q8d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q8d->Location = System::Drawing::Point(285, 65);
this->q8d->Name = L"q8d";
this->q8d->Size = System::Drawing::Size(99, 20);
this->q8d->TabIndex = 11;
this->q8d->TabStop = true;
this->q8d->Text = L"D) 1,854,423";
this->q8d->UseVisualStyleBackColor = false;
//
// q8b
//
this->q8b->AutoSize = true;
this->q8b->BackColor = System::Drawing::Color::Transparent;
this->q8b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q8b->Location = System::Drawing::Point(126, 66);

```

```

        this->q8b->Name = L"q8b";
        this->q8b->Size = System::Drawing::Size(99, 20);
        this->q8b->TabIndex = 10;
        this->q8b->TabStop = true;
        this->q8b->Text = L"B) 1,785,342";
        this->q8b->UseVisualStyleBackColor = false;
    //
    // q8c
    //
    this->q8c->AutoSize = true;
    this->q8c->BackColor = System::Drawing::Color::Transparent;
    this->q8c->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q8c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q8c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q8c->Location = System::Drawing::Point(285, 45);
    this->q8c->Name = L"q8c";
    this->q8c->Size = System::Drawing::Size(88, 20);
    this->q8c->TabIndex = 9;
    this->q8c->TabStop = true;
    this->q8c->Text = L"C) 109,620";
    this->q8c->UseVisualStyleBackColor = false;
//
// q8a
//
this->q8a->AutoSize = true;
this->q8a->BackColor = System::Drawing::Color::Transparent;
this->q8a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q8a->Location = System::Drawing::Point(126, 46);
    this->q8a->Name = L"q8a";
    this->q8a->Size = System::Drawing::Size(74, 20);
    this->q8a->TabIndex = 8;
    this->q8a->TabStop = true;
    this->q8a->Text = L"A) 1,832";
    this->q8a->UseVisualStyleBackColor = false;
//
// label16
//
this->label16->BackColor = System::Drawing::Color::DarkSlateGray;
this->label16->Dock = System::Windows::Forms::DockStyle::Top;
this->label16->ForeColor = System::Drawing::Color::Black;
this->label16->Location = System::Drawing::Point(41, 0);
this->label16->Name = L"label16";
this->label16->Size = System::Drawing::Size(553, 37);
this->label16->TabIndex = 7;
this->label16->Text = L"The sum of the integers from 58 to 1,890 is,
";
    this->label16-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label17
//
this->label17->BackColor = System::Drawing::Color::DarkSlateGray;

```

```

    this->label17->Dock = System::Windows::Forms::DockStyle::Left;
    this->label17->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label17->ForeColor = System::Drawing::Color::White;
    this->label17->Location = System::Drawing::Point(0, 0);
    this->label17->Name = L"label17";
    this->label17->Size = System::Drawing::Size(41, 100);
    this->label17->TabIndex = 6;
    this->label17->Text = L"Q8";
    this->label17-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
// panel11
//
this->panel11->BackColor = System::Drawing::Color::Transparent;
this->panel11->Controls->Add(this->q7d);
this->panel11->Controls->Add(this->q7b);
this->panel11->Controls->Add(this->q7c);
this->panel11->Controls->Add(this->q7a);
this->panel11->Controls->Add(this->label14);
this->panel11->Controls->Add(this->label15);
this->panel11->Dock = System::Windows::Forms::DockStyle::Top;
this->panel11->Location = System::Drawing::Point(0, 600);
this->panel11->Name = L"panel11";
this->panel11->Size = System::Drawing::Size(594, 100);
this->panel11->TabIndex = 15;
//
// q7d
//
this->q7d->AutoSize = true;
this->q7d->BackColor = System::Drawing::Color::Transparent;
this->q7d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q7d->Location = System::Drawing::Point(285, 65);
this->q7d->Name = L"q7d";
this->q7d->Size = System::Drawing::Size(56, 20);
this->q7d->TabIndex = 11;
this->q7d->TabStop = true;
this->q7d->Text = L"D) 51";
this->q7d->UseVisualStyleBackColor = false;
//
// q7b
//
this->q7b->AutoSize = true;
this->q7b->BackColor = System::Drawing::Color::Transparent;
this->q7b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q7b->Location = System::Drawing::Point(126, 66);
this->q7b->Name = L"q7b";
this->q7b->Size = System::Drawing::Size(56, 20);
this->q7b->TabIndex = 10;

```

```

this->q7b->TabStop = true;
this->q7b->Text = L"B) 18";
this->q7b->UseVisualStyleBackColor = false;
//
// q7c
//
this->q7c->AutoSize = true;
this->q7c->BackColor = System::Drawing::Color::Transparent;
this->q7c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q7c->Location = System::Drawing::Point(285, 45);
this->q7c->Name = L"q7c";
this->q7c->Size = System::Drawing::Size(56, 20);
this->q7c->TabIndex = 9;
this->q7c->TabStop = true;
this->q7c->Text = L"C) 36";
this->q7c->UseVisualStyleBackColor = false;
//
// q7a
//
this->q7a->AutoSize = true;
this->q7a->BackColor = System::Drawing::Color::Transparent;
this->q7a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q7a->Location = System::Drawing::Point(126, 46);
this->q7a->Name = L"q7a";
this->q7a->Size = System::Drawing::Size(56, 20);
this->q7a->TabIndex = 8;
this->q7a->TabStop = true;
this->q7a->Text = L"A) 22";
this->q7a->UseVisualStyleBackColor = false;
//
// label14
//
this->label14->BackColor = System::Drawing::Color::DarkSlateGray;
this->label14->Dock = System::Windows::Forms::DockStyle::Top;
this->label14->ForeColor = System::Drawing::Color::Black;
this->label14->Location = System::Drawing::Point(41, 0);
this->label14->Name = L"label14";
this->label14->Size = System::Drawing::Size(553, 37);
this->label14->TabIndex = 7;
this->label14->Text = L"What is the sum of the first 4 terms of a 4
term progression with a=3 and l=15?";
this->label14-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label15
//
this->label15->BackColor = System::Drawing::Color::DarkSlateGray;
this->label15->Dock = System::Windows::Forms::DockStyle::Left;
this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,

```

```

        static_cast<System::Byte>(0)));
this->label15->ForeColor = System::Drawing::Color::White;
this->label15->Location = System::Drawing::Point(0, 0);
this->label15->Name = L"label15";
this->label15->Size = System::Drawing::Size(41, 100);
this->label15->TabIndex = 6;
this->label15->Text = L"Q7";
this->label15-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel12
//
this->panel12->BackColor = System::Drawing::Color::Transparent;
this->panel12->Controls->Add(this->q6d);
this->panel12->Controls->Add(this->q6b);
this->panel12->Controls->Add(this->q6c);
this->panel12->Controls->Add(this->q6a);
this->panel12->Controls->Add(this->label12);
this->panel12->Controls->Add(this->label13);
this->panel12->Dock = System::Windows::Forms::DockStyle::Top;
this->panel12->Location = System::Drawing::Point(0, 500);
this->panel12->Name = L"panel12";
this->panel12->Size = System::Drawing::Size(594, 100);
this->panel12->TabIndex = 14;
//
// q6d
//
this->q6d->AutoSize = true;
this->q6d->BackColor = System::Drawing::Color::Transparent;
this->q6d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q6d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
this->q6d->Location = System::Drawing::Point(285, 65);
this->q6d->Name = L"q6d";
this->q6d->Size = System::Drawing::Size(132, 20);
this->q6d->TabIndex = 11;
this->q6d->TabStop = true;
this->q6d->Text = L"D) 41,45.5,50.4,52";
this->q6d->UseVisualStyleBackColor = false;
//
// q6b
//
this->q6b->AutoSize = true;
this->q6b->BackColor = System::Drawing::Color::Transparent;
this->q6b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q6b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
this->q6b->Location = System::Drawing::Point(126, 66);
this->q6b->Name = L"q6b";
this->q6b->Size = System::Drawing::Size(110, 20);
this->q6b->TabIndex = 10;
this->q6b->TabStop = true;
this->q6b->Text = L"B) 41,43,49,52";
this->q6b->UseVisualStyleBackColor = false;

```

```

//  

// q6c  

//  

this->q6c->AutoSize = true;  

this->q6c->BackColor = System::Drawing::Color::Transparent;  

this->q6c->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q6c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q6c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->q6c->Location = System::Drawing::Point(285, 45);  

this->q6c->Name = L"q6c";  

this->q6c->Size = System::Drawing::Size(132, 20);  

this->q6c->TabIndex = 9;  

this->q6c->TabStop = true;  

this->q6c->Text = L"C) 41,44.6,48.2,52";  

this->q6c->UseVisualStyleBackColor = false;  

//  

// q6a  

//  

this->q6a->AutoSize = true;  

this->q6a->BackColor = System::Drawing::Color::Transparent;  

this->q6a->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q6a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q6a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->q6a->Location = System::Drawing::Point(126, 46);  

this->q6a->Name = L"q6a";  

this->q6a->Size = System::Drawing::Size(110, 20);  

this->q6a->TabIndex = 8;  

this->q6a->TabStop = true;  

this->q6a->Text = L"A) 41,46,51,52";  

this->q6a->UseVisualStyleBackColor = false;  

//  

// label12  

//  

this->label12->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label12->Dock = System::Windows::Forms::DockStyle::Top;  

this->label12->ForeColor = System::Drawing::Color::Black;  

this->label12->Location = System::Drawing::Point(41, 0);  

this->label12->Name = L"label12";  

this->label12->Size = System::Drawing::Size(553, 37);  

this->label12->TabIndex = 7;  

this->label12->Text = L"If inserted 2 arithmetic means to a  

progression between 41 and 52, it would becom"  

L"e,";  

this->label12-> TextAlign =  

System::Drawing::ContentAlignment::MiddleLeft;  

//  

// label13  

//  

this->label13->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label13->Dock = System::Windows::Forms::DockStyle::Left;  

this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 12,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->label13->ForeColor = System::Drawing::Color::White;

```

```

this->label13->Location = System::Drawing::Point(0, 0);
this->label13->Name = L"label13";
this->label13->Size = System::Drawing::Size(41, 100);
this->label13->TabIndex = 6;
this->label13->Text = L"Q6";
this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel8
//
this->panel8->BackColor = System::Drawing::Color::Transparent;
this->panel8->Controls->Add(this->q5d);
this->panel8->Controls->Add(this->q5b);
this->panel8->Controls->Add(this->q5c);
this->panel8->Controls->Add(this->q5a);
this->panel8->Controls->Add(this->label10);
this->panel8->Controls->Add(this->label11);
this->panel8->Dock = System::Windows::Forms::DockStyle::Top;
this->panel8->Location = System::Drawing::Point(0, 400);
this->panel8->Name = L"panel8";
this->panel8->Size = System::Drawing::Size(594, 100);
this->panel8->TabIndex = 13;
//
// q5d
//
this->q5d->AutoSize = true;
this->q5d->BackColor = System::Drawing::Color::Transparent;
this->q5d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q5d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q5d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q5d->Location = System::Drawing::Point(285, 65);
this->q5d->Name = L"q5d";
this->q5d->Size = System::Drawing::Size(68, 20);
this->q5d->TabIndex = 11;
this->q5d->TabStop = true;
this->q5d->Text = L"D) 8.5x";
this->q5d->UseVisualStyleBackColor = false;
//
// q5b
//
this->q5b->AutoSize = true;
this->q5b->BackColor = System::Drawing::Color::Transparent;
this->q5b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q5b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q5b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q5b->Location = System::Drawing::Point(126, 66);
this->q5b->Name = L"q5b";
this->q5b->Size = System::Drawing::Size(68, 20);
this->q5b->TabIndex = 10;
this->q5b->TabStop = true;
this->q5b->Text = L"B) 5.2x";
this->q5b->UseVisualStyleBackColor = false;
//
// q5c

```

```

//  

this->q5c->AutoSize = true;  

this->q5c->BackColor = System::Drawing::Color::Transparent;  

this->q5c->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q5c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q5c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q5c->Location = System::Drawing::Point(285, 45);  

this->q5c->Name = L"q5c";  

this->q5c->Size = System::Drawing::Size(57, 20);  

this->q5c->TabIndex = 9;  

this->q5c->TabStop = true;  

this->q5c->Text = L"C) 6x";  

this->q5c->UseVisualStyleBackColor = false;  

//  

// q5a  

//  

this->q5a->AutoSize = true;  

this->q5a->BackColor = System::Drawing::Color::Transparent;  

this->q5a->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q5a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q5a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q5a->Location = System::Drawing::Point(126, 46);  

this->q5a->Name = L"q5a";  

this->q5a->Size = System::Drawing::Size(50, 20);  

this->q5a->TabIndex = 8;  

this->q5a->TabStop = true;  

this->q5a->Text = L"A) x";  

this->q5a->UseVisualStyleBackColor = false;  

//  

// label10  

//  

this->label10->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label10->Dock = System::Windows::Forms::DockStyle::Top;  

this->label10->ForeColor = System::Drawing::Color::Black;  

this->label10->Location = System::Drawing::Point(41, 0);  

this->label10->Name = L"label10";  

this->label10->Size = System::Drawing::Size(553, 37);  

this->label10->TabIndex = 7;  

this->label10->Text = L"What's the arithmetic mean of 5x,...,12x\?";  

this->label10-> TextAlign =  

System::Drawing::ContentAlignment::MiddleLeft;  

//  

// label11  

//  

this->label11->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label11->Dock = System::Windows::Forms::DockStyle::Left;  

this->label11->Font = (gcnew System::Drawing::Font(L"Arial", 12,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->label11->ForeColor = System::Drawing::Color::White;  

this->label11->Location = System::Drawing::Point(0, 0);  

this->label11->Name = L"label11";  

this->label11->Size = System::Drawing::Size(41, 100);  

this->label11->TabIndex = 6;

```

```

        this->label11->Text = L"Q5";
        this->label11->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // panel6
    //
    this->panel6->BackColor = System::Drawing::Color::Transparent;
    this->panel6->Controls->Add(this->q4d);
    this->panel6->Controls->Add(this->q4b);
    this->panel6->Controls->Add(this->q4c);
    this->panel6->Controls->Add(this->q4a);
    this->panel6->Controls->Add(this->label17);
    this->panel6->Controls->Add(this->label18);
    this->panel6->Dock = System::Windows::Forms::DockStyle::Top;
    this->panel6->Location = System::Drawing::Point(0, 300);
    this->panel6->Name = L"panel6";
    this->panel6->Size = System::Drawing::Size(594, 100);
    this->panel6->TabIndex = 11;
    //
    // q4d
    //
    this->q4d->AutoSize = true;
    this->q4d->BackColor = System::Drawing::Color::Transparent;
    this->q4d->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q4d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q4d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q4d->Location = System::Drawing::Point(285, 65);
    this->q4d->Name = L"q4d";
    this->q4d->Size = System::Drawing::Size(56, 20);
    this->q4d->TabIndex = 11;
    this->q4d->TabStop = true;
    this->q4d->Text = L"D) 12";
    this->q4d->UseVisualStyleBackColor = false;
    //
    // q4b
    //
    this->q4b->AutoSize = true;
    this->q4b->BackColor = System::Drawing::Color::Transparent;
    this->q4b->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q4b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q4b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q4b->Location = System::Drawing::Point(126, 66);
    this->q4b->Name = L"q4b";
    this->q4b->Size = System::Drawing::Size(60, 20);
    this->q4b->TabIndex = 10;
    this->q4b->TabStop = true;
    this->q4b->Text = L"B) -38";
    this->q4b->UseVisualStyleBackColor = false;
    //
    // q4c
    //
    this->q4c->AutoSize = true;
    this->q4c->BackColor = System::Drawing::Color::Transparent;
    this->q4c->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

this->q4c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4c->Location = System::Drawing::Point(285, 45);
this->q4c->Name = L"q4c";
this->q4c->Size = System::Drawing::Size(60, 20);
this->q4c->TabIndex = 9;
this->q4c->TabStop = true;
this->q4c->Text = L"C) -56";
this->q4c->UseVisualStyleBackColor = false;
//
// q4a
//
this->q4a->AutoSize = true;
this->q4a->BackColor = System::Drawing::Color::Transparent;
this->q4a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q4a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4a->Location = System::Drawing::Point(126, 46);
this->q4a->Name = L"q4a";
this->q4a->Size = System::Drawing::Size(56, 20);
this->q4a->TabIndex = 8;
this->q4a->TabStop = true;
this->q4a->Text = L"A) 45";
this->q4a->UseVisualStyleBackColor = false;
//
// label7
//
this->label7->BackColor = System::Drawing::Color::DarkSlateGray;
this->label7->Dock = System::Windows::Forms::DockStyle::Top;
this->label7->ForeColor = System::Drawing::Color::Black;
this->label7->Location = System::Drawing::Point(41, 0);
this->label7->Name = L"label7";
this->label7->Size = System::Drawing::Size(553, 37);
this->label7->TabIndex = 7;
this->label7->Text = L"The arithmetic mean of 56 and -94 is, ";
this->label7-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label8
//
this->label8->BackColor = System::Drawing::Color::DarkSlateGray;
this->label8->Dock = System::Windows::Forms::DockStyle::Left;
this->label8->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label8->ForeColor = System::Drawing::Color::White;
this->label8->Location = System::Drawing::Point(0, 0);
this->label8->Name = L"label8";
this->label8->Size = System::Drawing::Size(41, 100);
this->label8->TabIndex = 6;
this->label8->Text = L"Q4";
this->label8-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//

```

```

// panel5
//
this->panel5->BackColor = System::Drawing::Color::Transparent;
this->panel5->Controls->Add(this->q3d);
this->panel5->Controls->Add(this->q3b);
this->panel5->Controls->Add(this->q3c);
this->panel5->Controls->Add(this->q3a);
this->panel5->Controls->Add(this->label15);
this->panel5->Controls->Add(this->label16);
this->panel5->Dock = System::Windows::Forms::DockStyle::Top;
this->panel5->Location = System::Drawing::Point(0, 200);
this->panel5->Name = L"panel5";
this->panel5->Size = System::Drawing::Size(594, 100);
this->panel5->TabIndex = 10;
//
// q3d
//
this->q3d->AutoSize = true;
this->q3d->BackColor = System::Drawing::Color::Transparent;
this->q3d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3d->Location = System::Drawing::Point(285, 65);
this->q3d->Name = L"q3d";
this->q3d->Size = System::Drawing::Size(80, 20);
this->q3d->TabIndex = 11;
this->q3d->TabStop = true;
this->q3d->Text = L"D) 94,112";
this->q3d->UseVisualStyleBackColor = false;
//
// q3b
//
this->q3b->AutoSize = true;
this->q3b->BackColor = System::Drawing::Color::Transparent;
this->q3b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3b->Location = System::Drawing::Point(126, 66);
this->q3b->Name = L"q3b";
this->q3b->Size = System::Drawing::Size(88, 20);
this->q3b->TabIndex = 10;
this->q3b->TabStop = true;
this->q3b->Text = L"B) -112,-94";
this->q3b->UseVisualStyleBackColor = false;
//
// q3c
//
this->q3c->AutoSize = true;
this->q3c->BackColor = System::Drawing::Color::Transparent;
this->q3c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));

```

```

this->q3c->Location = System::Drawing::Point(285, 45);
this->q3c->Name = L"q3c";
this->q3c->Size = System::Drawing::Size(82, 20);
this->q3c->TabIndex = 9;
this->q3c->TabStop = true;
this->q3c->Text = L"C) -67,-85";
this->q3c->UseVisualStyleBackColor = false;
//
// q3a
//
this->q3a->AutoSize = true;
this->q3a->BackColor = System::Drawing::Color::Transparent;
this->q3a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3a->Location = System::Drawing::Point(126, 46);
this->q3a->Name = L"q3a";
this->q3a->Size = System::Drawing::Size(74, 20);
this->q3a->TabIndex = 8;
this->q3a->TabStop = true;
this->q3a->Text = L"A) 67,85";
this->q3a->UseVisualStyleBackColor = false;
//
// label5
//
this->label5->BackColor = System::Drawing::Color::DarkSlateGray;
this->label5->Dock = System::Windows::Forms::DockStyle::Top;
this->label5->ForeColor = System::Drawing::Color::Black;
this->label5->Location = System::Drawing::Point(41, 0);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(553, 37);
this->label5->TabIndex = 7;
this->label5->Text = L"An arithmetic progression has a common
difference of 4.5 and its 7th term is -85,"
    L" what are its first and 3rd terms\?";
this->label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label6
//
this->label6->BackColor = System::Drawing::Color::DarkSlateGray;
this->label6->Dock = System::Windows::Forms::DockStyle::Left;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label6->ForeColor = System::Drawing::Color::White;
this->label6->Location = System::Drawing::Point(0, 0);
this->label6->Name = L"label6";
this->label6->Size = System::Drawing::Size(41, 100);
this->label6->TabIndex = 6;
this->label6->Text = L"Q3";
this->label6-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel4
//

```

```

this->panel4->BackColor = System::Drawing::Color::Transparent;
this->panel4->Controls->Add(this->q2d);
this->panel4->Controls->Add(this->q2b);
this->panel4->Controls->Add(this->q2c);
this->panel4->Controls->Add(this->q2a);
this->panel4->Controls->Add(this->label13);
this->panel4->Controls->Add(this->label14);
this->panel4->Dock = System::Windows::Forms::DockStyle::Top;
this->panel4->Location = System::Drawing::Point(0, 100);
this->panel4->Name = L"panel4";
this->panel4->Size = System::Drawing::Size(594, 100);
this->panel4->TabIndex = 9;
//
// q2d
//
this->q2d->AutoSize = true;
this->q2d->BackColor = System::Drawing::Color::Transparent;
this->q2d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q2d->Location = System::Drawing::Point(285, 65);
this->q2d->Name = L"q2d";
this->q2d->Size = System::Drawing::Size(103, 20);
this->q2d->TabIndex = 11;
this->q2d->TabStop = true;
this->q2d->Text = L"D) 7,12,17,22";
this->q2d->UseVisualStyleBackColor = false;
//
// q2b
//
this->q2b->AutoSize = true;
this->q2b->BackColor = System::Drawing::Color::Transparent;
this->q2b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q2b->Location = System::Drawing::Point(126, 66);
this->q2b->Name = L"q2b";
this->q2b->Size = System::Drawing::Size(95, 20);
this->q2b->TabIndex = 10;
this->q2b->TabStop = true;
this->q2b->Text = L"B) 7,9,11,13";
this->q2b->UseVisualStyleBackColor = false;
//
// q2c
//
this->q2c->AutoSize = true;
this->q2c->BackColor = System::Drawing::Color::Transparent;
this->q2c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q2c->Location = System::Drawing::Point(285, 45);
this->q2c->Name = L"q2c";

```

```

this->q2c->Size = System::Drawing::Size(103, 20);
this->q2c->TabIndex = 9;
this->q2c->TabStop = true;
this->q2c->Text = L"C) 7,14,21,28";
this->q2c->UseVisualStyleBackColor = false;
//
// q2a
//
this->q2a->AutoSize = true;
this->q2a->BackColor = System::Drawing::Color::Transparent;
this->q2a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q2a->Location = System::Drawing::Point(126, 46);
this->q2a->Name = L"q2a";
this->q2a->Size = System::Drawing::Size(89, 20);
this->q2a->TabIndex = 8;
this->q2a->TabStop = true;
this->q2a->Text = L"A) 4,6,8,10";
this->q2a->UseVisualStyleBackColor = false;
//
// label3
//
this->label3->BackColor = System::Drawing::Color::DarkSlateGray;
this->label3->Dock = System::Windows::Forms::DockStyle::Top;
this->label3->ForeColor = System::Drawing::Color::Black;
this->label3->Location = System::Drawing::Point(41, 0);
this->label3->Name = L"label3";
this->label3->Size = System::Drawing::Size(553, 37);
this->label3->TabIndex = 7;
this->label3->Text = L"The first 4 values of the progression having
a=7 and d=2 is, ";
    this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label4
//
this->label4->BackColor = System::Drawing::Color::DarkSlateGray;
this->label4->Dock = System::Windows::Forms::DockStyle::Left;
this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label4->ForeColor = System::Drawing::Color::White;
this->label4->Location = System::Drawing::Point(0, 0);
this->label4->Name = L"label4";
this->label4->Size = System::Drawing::Size(41, 100);
this->label4->TabIndex = 6;
this->label4->Text = L"Q2";
this->label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel2
//
this->panel2->BackColor = System::Drawing::Color::Transparent;
this->panel2->Controls->Add(this->q1d);
this->panel2->Controls->Add(this->q1b);

```

```

this->panel2->Controls->Add(this->q1c);
this->panel2->Controls->Add(this->q1a);
this->panel2->Controls->Add(this->label12);
this->panel2->Controls->Add(this->label11);
this->panel2->Dock = System::Windows::Forms::DockStyle::Top;
this->panel2->Location = System::Drawing::Point(0, 0);
this->panel2->Name = L"panel2";
this->panel2->Size = System::Drawing::Size(594, 100);
this->panel2->TabIndex = 8;
//
// q1d
//
this->q1d->AutoSize = true;
this->q1d->BackColor = System::Drawing::Color::Transparent;
this->q1d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1d->Location = System::Drawing::Point(285, 65);
this->q1d->Name = L"q1d";
this->q1d->Size = System::Drawing::Size(56, 20);
this->q1d->TabIndex = 5;
this->q1d->TabStop = true;
this->q1d->Text = L"D) 20";
this->q1d->UseVisualStyleBackColor = false;
//
// q1b
//
this->q1b->AutoSize = true;
this->q1b->BackColor = System::Drawing::Color::Transparent;
this->q1b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1b->Location = System::Drawing::Point(126, 66);
this->q1b->Name = L"q1b";
this->q1b->Size = System::Drawing::Size(49, 20);
this->q1b->TabIndex = 4;
this->q1b->TabStop = true;
this->q1b->Text = L"B) 5";
this->q1b->UseVisualStyleBackColor = false;
//
// q1c
//
this->q1c->AutoSize = true;
this->q1c->BackColor = System::Drawing::Color::Transparent;
this->q1c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1c->Location = System::Drawing::Point(285, 45);
this->q1c->Name = L"q1c";
this->q1c->Size = System::Drawing::Size(56, 20);
this->q1c->TabIndex = 3;
this->q1c->TabStop = true;

```

```

this->q1c->Text = L"C) 13";
this->q1c->UseVisualStyleBackColor = false;
//
// q1a
//
this->q1a->AutoSize = true;
this->q1a->BackColor = System::Drawing::Color::Transparent;
this->q1a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q1a->Location = System::Drawing::Point(126, 46);
this->q1a->Name = L"q1a";
this->q1a->Size = System::Drawing::Size(56, 20);
this->q1a->TabIndex = 2;
this->q1a->TabStop = true;
this->q1a->Text = L"A) 45";
this->q1a->UseVisualStyleBackColor = false;
//
// label2
//
this->label2->BackColor = System::Drawing::Color::DarkSlateGray;
this->label2->Dock = System::Windows::Forms::DockStyle::Top;
this->label2->ForeColor = System::Drawing::Color::Black;
this->label2->Location = System::Drawing::Point(41, 0);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(553, 37);
this->label2->TabIndex = 1;
this->label2->Text = L"Find the 6th term of the arithmetic
progression: 5,8,11,...\r\n";
this->label2-> TextAlign =
System::Drawing::ContentAlignment::BottomLeft;
//
// label1
//
this->label1->BackColor = System::Drawing::Color::DarkSlateGray;
this->label1->Dock = System::Windows::Forms::DockStyle::Left;
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label1->ForeColor = System::Drawing::Color::White;
this->label1->Location = System::Drawing::Point(0, 0);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(41, 100);
this->label1->TabIndex = 0;
this->label1->Text = L"Q1";
this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// apE
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->ClientSize = System::Drawing::Size(623, 447);
this->Controls->Add(this->panel1);
this->ForeColor = System::Drawing::Color::Black;

```

```

        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"apE";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"Arithmatic Progression Examination";
        this->SizeChanged += gcnew System::EventHandler(this,
&apE::apE_SizeChanged);
        this->panel1->ResumeLayout(false);
        this->panel7->ResumeLayout(false);
        this->panel7->PerformLayout();
        this->panel9->ResumeLayout(false);
        this->panel9->PerformLayout();
        this->panel10->ResumeLayout(false);
        this->panel10->PerformLayout();
        this->panel11->ResumeLayout(false);
        this->panel11->PerformLayout();
        this->panel12->ResumeLayout(false);
        this->panel12->PerformLayout();
        this->panel8->ResumeLayout(false);
        this->panel8->PerformLayout();
        this->panel6->ResumeLayout(false);
        this->panel6->PerformLayout();
        this->panel5->ResumeLayout(false);
        this->panel5->PerformLayout();
        this->panel4->ResumeLayout(false);
        this->panel4->PerformLayout();
        this->panel2->ResumeLayout(false);
        this->panel2->PerformLayout();
        this->ResumeLayout(false);

    }

#pragma endregion

    void setAnswer(){
        core->aSet[0]=q1d;
        core->aSet[1]=q2b;
        core->aSet[2]=q3b;
        core->aSet[3]=q4b;
        core->aSet[4]=q5d;
        core->aSet[5]=q6c;
        core->aSet[6]=q7c;
        core->aSet[7]=q8b;
        core->aSet[8]=q9a;
        core->aSet[9]=q10a;
    }
private: System::Void apE_SizeChanged(System::Object^ sender, System::EventArgs^ e) {
    this->CenterToScreen();
}};
```

5. ForU.cpp (Formulae)

Formulae

Formulae

Your Examination Progress

0:30:57

Exam in Progress

Current Exam Progress = 0 Last Exam Progress = 0

The correct way to make r the subject of the formula: $t^2 = 3pq + r^2t^2$ is.

Q1

A) $r^2 = 3pq + t^2r^2$ C) $t = 3pq + r^2t =$
 B) $r = \sqrt{3pq + t^2r}$ D) $r = pq t^2 r = pq$

When c is made the subject of the formula: $B = \pi c^2 a$, it would become.

Q2

A) $c = \sqrt{\frac{B}{\pi a}}$ C) $c = \pi B^2 a c$
 B) $c^2 = \pi B^2 a$ D) $c^2 = \sqrt{\frac{B}{\pi a}}$

The formula: $q = pc+ab$, when substituted with $a=5$, $b=10$, $c=3$ and $p=7$, would make q to be.

Q3

A) 22 C) 71
 B) 40 D) 80

```
#include "binoE.h"
```

6. ForU.h (Formulae)

```
#pragma once
#include "CoreControls.h"

namespace mExams {

    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 ForU
    /// </summary>
public ref class ForU : public System::Windows::Forms::Form
{
public:
    Core ^ core;
    ForU(void)
    {
        InitializeComponent();
        core= gcnew Core("Formulae", this,"fors");
        setAnswer();
    }
    void setAnswer(){
        core->aSet[0]=q1b;
        core->aSet[1]=q2a;
        core->aSet[2]=q3c;
        core->aSet[3]=q4a;
        core->aSet[4]=q5b;
        core->aSet[5]=q6c;
        core->aSet[6]=q7a;
        core->aSet[7]=q8b;
        core->aSet[8]=q9c;
        core->aSet[9]=q10c;
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
~ForU()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::RadioButton^ q5d;
protected:
private: System::Windows::Forms::RadioButton^ q4d;
private: System::Windows::Forms::RadioButton^ q4b;
private: System::Windows::Forms::RadioButton^ q4c;
private: System::Windows::Forms::RadioButton^ q4a;
```

```
private: System::Windows::Forms::Label^  label7;
private: System::Windows::Forms::Label^  label8;
internal: System::Windows::Forms::Panel^  panel6;
private:
private: System::Windows::Forms::RadioButton^  q5b;
internal:
private: System::Windows::Forms::RadioButton^  q5c;
private: System::Windows::Forms::RadioButton^  q5a;
private: System::Windows::Forms::Label^  label10;
private: System::Windows::Forms::RadioButton^  q6d;
private: System::Windows::Forms::RadioButton^  q6b;
private: System::Windows::Forms::RadioButton^  q6c;
private: System::Windows::Forms::RadioButton^  q6a;
internal: System::Windows::Forms::Panel^  panel5;
private:
private: System::Windows::Forms::RadioButton^  q3d;
internal:
private: System::Windows::Forms::RadioButton^  q3b;
private: System::Windows::Forms::RadioButton^  q3c;
private: System::Windows::Forms::RadioButton^  q3a;
private: System::Windows::Forms::Label^  label5;
private: System::Windows::Forms::Label^  label6;
private: System::Windows::Forms::Label^  label11;
private: System::Windows::Forms::RadioButton^  q1d;
private: System::Windows::Forms::RadioButton^  q1b;
private: System::Windows::Forms::RadioButton^  q1c;
private: System::Windows::Forms::RadioButton^  q1a;
private: System::Windows::Forms::Label^  label1;
private: System::Windows::Forms::RadioButton^  q2d;
private: System::Windows::Forms::RadioButton^  q2b;
private: System::Windows::Forms::RadioButton^  q2c;
internal: System::Windows::Forms::Panel^  panel2;
private:
private: System::Windows::Forms::Label^  label2;
internal:
private: System::Windows::Forms::RadioButton^  q2a;
private: System::Windows::Forms::Label^  label4;
internal: System::Windows::Forms::Panel^  panel4;
private:
private: System::Windows::Forms::Label^  label3;
internal:
private: System::Windows::Forms::Label^  label12;
private: System::Windows::Forms::ToolTip^  ttip;
private: System::Windows::Forms::Panel^  panel1;
internal: System::Windows::Forms::Panel^  panel7;
private:
private: System::Windows::Forms::RadioButton^  q10d;
internal:
private: System::Windows::Forms::RadioButton^  q10b;
private: System::Windows::Forms::RadioButton^  q10c;
private: System::Windows::Forms::RadioButton^  q10a;
private: System::Windows::Forms::Label^  label20;
private: System::Windows::Forms::Label^  label21;
internal: System::Windows::Forms::Panel^  panel9;
private:
private: System::Windows::Forms::RadioButton^  q9d;
internal:
private: System::Windows::Forms::RadioButton^  q9b;
```

```

private: System::Windows::Forms::RadioButton^ q9c;
private: System::Windows::Forms::RadioButton^ q9a;
private: System::Windows::Forms::Label^ label18;
private: System::Windows::Forms::Label^ label19;
internal: System::Windows::Forms::Panel^ panel10;
private:
private: System::Windows::Forms::RadioButton^ q8d;
internal:
private: System::Windows::Forms::RadioButton^ q8b;
private: System::Windows::Forms::RadioButton^ q8c;
private: System::Windows::Forms::RadioButton^ q8a;
private: System::Windows::Forms::Label^ label16;
private: System::Windows::Forms::Label^ label17;
internal: System::Windows::Forms::Panel^ panel11;
private:
private: System::Windows::Forms::RadioButton^ q7d;
internal:
private: System::Windows::Forms::RadioButton^ q7b;
private: System::Windows::Forms::RadioButton^ q7c;
private: System::Windows::Forms::RadioButton^ q7a;
private: System::Windows::Forms::Label^ label14;
private: System::Windows::Forms::Label^ label15;
internal: System::Windows::Forms::Panel^ panel12;
private:
private: System::Windows::Forms::Label^ label13;
internal:
internal: System::Windows::Forms::Panel^ panel18;
private: System::Windows::Forms::PictureBox^ pictureBox1;
private: System::Windows::Forms::PictureBox^ pictureBox5;
private: System::Windows::Forms::PictureBox^ pictureBox4;
private: System::Windows::Forms::PictureBox^ pictureBox3;
private: System::Windows::Forms::PictureBox^ pictureBox2;
private: System::Windows::Forms::PictureBox^ pictureBox6;
private: System::Windows::Forms::PictureBox^ pictureBox7;
private: System::Windows::Forms::PictureBox^ pictureBox8;
private: System::Windows::Forms::PictureBox^ pictureBox10;
private: System::Windows::Forms::PictureBox^ pictureBox9;
private: System::Windows::Forms::PictureBox^ pictureBox11;
private: System::Windows::Forms::PictureBox^ pictureBox12;
internal:
private:
private: System::ComponentModel::.IContainer^ components;
internal:

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

#pragma region Windows Form Designer generated code
/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
void InitializeComponent(void)
{
    this->components = (gcnew System::ComponentModel::Container());
}

```

```

System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(Form1::typeid));
this->q5d = (gcnew System::Windows::Forms::RadioButton());
this->q4d = (gcnew System::Windows::Forms::RadioButton());
this->q4b = (gcnew System::Windows::Forms::RadioButton());
this->q4c = (gcnew System::Windows::Forms::RadioButton());
this->q4a = (gcnew System::Windows::Forms::RadioButton());
this->label7 = (gcnew System::Windows::Forms::Label());
this->label8 = (gcnew System::Windows::Forms::Label());
this->panel6 = (gcnew System::Windows::Forms::Panel());
this->q5b = (gcnew System::Windows::Forms::RadioButton());
this->q5c = (gcnew System::Windows::Forms::RadioButton());
this->q5a = (gcnew System::Windows::Forms::RadioButton());
this->label10 = (gcnew System::Windows::Forms::Label());
this->q6d = (gcnew System::Windows::Forms::RadioButton());
this->q6b = (gcnew System::Windows::Forms::RadioButton());
this->q6c = (gcnew System::Windows::Forms::RadioButton());
this->q6a = (gcnew System::Windows::Forms::RadioButton());
this->panel5 = (gcnew System::Windows::Forms::Panel());
this->q3d = (gcnew System::Windows::Forms::RadioButton());
this->q3b = (gcnew System::Windows::Forms::RadioButton());
this->q3c = (gcnew System::Windows::Forms::RadioButton());
this->q3a = (gcnew System::Windows::Forms::RadioButton());
this->label5 = (gcnew System::Windows::Forms::Label());
this->label6 = (gcnew System::Windows::Forms::Label());
this->label11 = (gcnew System::Windows::Forms::Label());
this->q1d = (gcnew System::Windows::Forms::RadioButton());
this->q1b = (gcnew System::Windows::Forms::RadioButton());
this->q1c = (gcnew System::Windows::Forms::RadioButton());
this->q1a = (gcnew System::Windows::Forms::RadioButton());
this->label1 = (gcnew System::Windows::Forms::Label());
this->q2d = (gcnew System::Windows::Forms::RadioButton());
this->q2b = (gcnew System::Windows::Forms::RadioButton());
this->q2c = (gcnew System::Windows::Forms::RadioButton());
this->panel12 = (gcnew System::Windows::Forms::Panel());
this->pictureBox5 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox4 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox3 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox2 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
this->label2 = (gcnew System::Windows::Forms::Label());
this->q2a = (gcnew System::Windows::Forms::RadioButton());
this->label4 = (gcnew System::Windows::Forms::Label());
this->panel4 = (gcnew System::Windows::Forms::Panel());
this->pictureBox10 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox9 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox8 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox7 = (gcnew System::Windows::Forms::PictureBox());
this->pictureBox6 = (gcnew System::Windows::Forms::PictureBox());
this->label3 = (gcnew System::Windows::Forms::Label());
this->label12 = (gcnew System::Windows::Forms::Label());
this->tTip = (gcnew System::Windows::Forms::ToolTip(this-
>components));
this->panel1 = (gcnew System::Windows::Forms::Panel());
this->panel7 = (gcnew System::Windows::Forms::Panel());
this->q10d = (gcnew System::Windows::Forms::RadioButton());
this->q10b = (gcnew System::Windows::Forms::RadioButton());
this->q10c = (gcnew System::Windows::Forms::RadioButton());

```

```

this->q10a = (gcnew System::Windows::Forms::RadioButton());
this->label20 = (gcnew System::Windows::Forms::Label());
this->label21 = (gcnew System::Windows::Forms::Label());
this->panel9 = (gcnew System::Windows::Forms::Panel());
this->pictureBox12 = (gcnew System::Windows::Forms::PictureBox());
this->q9d = (gcnew System::Windows::Forms::RadioButton());
this->q9b = (gcnew System::Windows::Forms::RadioButton());
this->q9c = (gcnew System::Windows::Forms::RadioButton());
this->q9a = (gcnew System::Windows::Forms::RadioButton());
this->label18 = (gcnew System::Windows::Forms::Label());
this->label19 = (gcnew System::Windows::Forms::Label());
this->panel10 = (gcnew System::Windows::Forms::Panel());
this->pictureBox11 = (gcnew System::Windows::Forms::PictureBox());
this->q8d = (gcnew System::Windows::Forms::RadioButton());
this->q8b = (gcnew System::Windows::Forms::RadioButton());
this->q8c = (gcnew System::Windows::Forms::RadioButton());
this->q8a = (gcnew System::Windows::Forms::RadioButton());
this->label16 = (gcnew System::Windows::Forms::Label());
this->label17 = (gcnew System::Windows::Forms::Label());
this->panel11 = (gcnew System::Windows::Forms::Panel());
this->q7d = (gcnew System::Windows::Forms::RadioButton());
this->q7b = (gcnew System::Windows::Forms::RadioButton());
this->q7c = (gcnew System::Windows::Forms::RadioButton());
this->q7a = (gcnew System::Windows::Forms::RadioButton());
this->label14 = (gcnew System::Windows::Forms::Label());
this->label15 = (gcnew System::Windows::Forms::Label());
this->panel12 = (gcnew System::Windows::Forms::Panel());
this->label13 = (gcnew System::Windows::Forms::Label());
this->panel18 = (gcnew System::Windows::Forms::Panel());
this->panel6->SuspendLayout();
this->panel5->SuspendLayout();
this->panel2->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox5))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox4))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox3))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox2))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox1))->BeginInit();
this->panel4->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox10))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox9))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox8))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox7))->BeginInit();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox6))->BeginInit();
this->panel1->SuspendLayout();
this->panel7->SuspendLayout();
this->panel9->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this->pictureBox12))->BeginInit();

```

```

        this->panel10->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox11))->BeginInit();
        this->panel11->SuspendLayout();
        this->panel12->SuspendLayout();
        this->panel8->SuspendLayout();
        this->SuspendLayout();
        //
        // q5d
        //
        this->q5d->AutoSize = true;
        this->q5d->BackColor = System::Drawing::Color::Transparent;
        this->q5d->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q5d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q5d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->q5d->Location = System::Drawing::Point(285, 65);
        this->q5d->Name = L"q5d";
        this->q5d->Size = System::Drawing::Size(74, 20);
        this->q5d->TabIndex = 11;
        this->q5d->TabStop = true;
        this->q5d->Text = L"D) 1,224";
        this->q5d->UseVisualStyleBackColor = false;
        //
        // q4d
        //
        this->q4d->AutoSize = true;
        this->q4d->BackColor = System::Drawing::Color::Transparent;
        this->q4d->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q4d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q4d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->q4d->Location = System::Drawing::Point(285, 65);
        this->q4d->Name = L"q4d";
        this->q4d->Size = System::Drawing::Size(49, 20);
        this->q4d->TabIndex = 11;
        this->q4d->TabStop = true;
        this->q4d->Text = L"D) 9";
        this->q4d->UseVisualStyleBackColor = false;
        //
        // q4b
        //
        this->q4b->AutoSize = true;
        this->q4b->BackColor = System::Drawing::Color::Transparent;
        this->q4b->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q4b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q4b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
            static_cast<System::Byte>(0)));
        this->q4b->Location = System::Drawing::Point(126, 66);
        this->q4b->Name = L"q4b";
        this->q4b->Size = System::Drawing::Size(63, 20);
        this->q4b->TabIndex = 10;
        this->q4b->TabStop = true;
        this->q4b->Text = L"B) 676";
        this->q4b->UseVisualStyleBackColor = false;

```

```

//  

// q4c  

//  

this->q4c->AutoSize = true;  

this->q4c->BackColor = System::Drawing::Color::Transparent;  

this->q4c->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q4c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q4c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->q4c->Location = System::Drawing::Point(285, 45);  

this->q4c->Name = L"q4c";  

this->q4c->Size = System::Drawing::Size(56, 20);  

this->q4c->TabIndex = 9;  

this->q4c->TabStop = true;  

this->q4c->Text = L"C) 57";  

this->q4c->UseVisualStyleBackColor = false;  

//  

// q4a  

//  

this->q4a->AutoSize = true;  

this->q4a->BackColor = System::Drawing::Color::Transparent;  

this->q4a->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q4a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q4a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->q4a->Location = System::Drawing::Point(126, 46);  

this->q4a->Name = L"q4a";  

this->q4a->Size = System::Drawing::Size(63, 20);  

this->q4a->TabIndex = 8;  

this->q4a->TabStop = true;  

this->q4a->Text = L"A) 581";  

this->q4a->UseVisualStyleBackColor = false;  

//  

// label7  

//  

this->label7->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label7->Dock = System::Windows::Forms::DockStyle::Top;  

this->label7->ForeColor = System::Drawing::Color::Black;  

this->label7->Location = System::Drawing::Point(41, 0);  

this->label7->Name = L"label7";  

this->label7->Size = System::Drawing::Size(553, 37);  

this->label7->TabIndex = 7;  

this->label7->Text = L"When substituted with values, e=89 and f=45,  

what would z be in the formula: z=4e"  

L"+5f\?";  

this->label7-> TextAlign =  

System::Drawing::ContentAlignment::MiddleLeft;  

//  

// label8  

//  

this->label8->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label8->Dock = System::Windows::Forms::DockStyle::Left;  

this->label8->Font = (gcnew System::Drawing::Font(L"Arial", 12,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->label8->ForeColor = System::Drawing::Color::White;

```

```

this->label8->Location = System::Drawing::Point(0, 0);
this->label8->Name = L"label8";
this->label8->Size = System::Drawing::Size(41, 100);
this->label8->TabIndex = 6;
this->label8->Text = L"Q4";
this->label8-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel6
//
this->panel6->BackColor = System::Drawing::Color::Transparent;
this->panel6->Controls->Add(this->q4d);
this->panel6->Controls->Add(this->q4b);
this->panel6->Controls->Add(this->q4c);
this->panel6->Controls->Add(this->q4a);
this->panel6->Controls->Add(this->label17);
this->panel6->Controls->Add(this->label18);
this->panel6->Dock = System::Windows::Forms::DockStyle::Top;
this->panel6->Location = System::Drawing::Point(0, 337);
this->panel6->Name = L"panel6";
this->panel6->Size = System::Drawing::Size(594, 100);
this->panel6->TabIndex = 11;
//
// q5b
//
this->q5b->AutoSize = true;
this->q5b->BackColor = System::Drawing::Color::Transparent;
this->q5b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q5b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q5b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q5b->Location = System::Drawing::Point(126, 66);
this->q5b->Name = L"q5b";
this->q5b->Size = System::Drawing::Size(81, 20);
this->q5b->TabIndex = 10;
this->q5b->TabStop = true;
this->q5b->Text = L"B) 20,895";
this->q5b->UseVisualStyleBackColor = false;
//
// q5c
//
this->q5c->AutoSize = true;
this->q5c->BackColor = System::Drawing::Color::Transparent;
this->q5c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q5c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q5c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q5c->Location = System::Drawing::Point(285, 45);
this->q5c->Name = L"q5c";
this->q5c->Size = System::Drawing::Size(80, 20);
this->q5c->TabIndex = 9;
this->q5c->TabStop = true;
this->q5c->Text = L"C) 11,234";
this->q5c->UseVisualStyleBackColor = false;
//
// q5a

```

```

//  

this->q5a->AutoSize = true;  

this->q5a->BackColor = System::Drawing::Color::Transparent;  

this->q5a->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q5a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q5a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q5a->Location = System::Drawing::Point(126, 46);  

this->q5a->Name = L"q5a";  

this->q5a->Size = System::Drawing::Size(81, 20);  

this->q5a->TabIndex = 8;  

this->q5a->TabStop = true;  

this->q5a->Text = L"A) 15,671";  

this->q5a->UseVisualStyleBackColor = false;  

//  

// label10  

//  

this->label10->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label10->Dock = System::Windows::Forms::DockStyle::Top;  

this->label10->ForeColor = System::Drawing::Color::Black;  

this->label10->Location = System::Drawing::Point(41, 0);  

this->label10->Name = L"label10";  

this->label10->Size = System::Drawing::Size(553, 37);  

this->label10->TabIndex = 7;  

this->label10->Text = L"Let a=67, b=34 and c=23 in the Formula:  

y=4a2+3b2-c2, what would y be?";  

this->label10-> TextAlign =  

System::Drawing::ContentAlignment::MiddleLeft;  

//  

// q6d  

//  

this->q6d->AutoSize = true;  

this->q6d->BackColor = System::Drawing::Color::Transparent;  

this->q6d->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q6d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q6d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q6d->Location = System::Drawing::Point(285, 65);  

this->q6d->Name = L"q6d";  

this->q6d->Size = System::Drawing::Size(81, 20);  

this->q6d->TabIndex = 11;  

this->q6d->TabStop = true;  

this->q6d->Text = L"D) 33,512";  

this->q6d->UseVisualStyleBackColor = false;  

//  

// q6b  

//  

this->q6b->AutoSize = true;  

this->q6b->BackColor = System::Drawing::Color::Transparent;  

this->q6b->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q6b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q6b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q6b->Location = System::Drawing::Point(126, 66);  

this->q6b->Name = L"q6b";

```

```

this->q6b->Size = System::Drawing::Size(92, 20);
this->q6b->TabIndex = 10;
this->q6b->TabStop = true;
this->q6b->Text = L"B) 5,789.23";
this->q6b->UseVisualStyleBackColor = false;
//
// q6c
//
this->q6c->AutoSize = true;
this->q6c->BackColor = System::Drawing::Color::Transparent;
this->q6c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q6c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q6c->Location = System::Drawing::Point(285, 45);
this->q6c->Name = L"q6c";
this->q6c->Size = System::Drawing::Size(92, 20);
this->q6c->TabIndex = 9;
this->q6c->TabStop = true;
this->q6c->Text = L"C) 1,197.65";
this->q6c->UseVisualStyleBackColor = false;
//
// q6a
//
this->q6a->AutoSize = true;
this->q6a->BackColor = System::Drawing::Color::Transparent;
this->q6a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q6a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q6a->Location = System::Drawing::Point(126, 46);
this->q6a->Name = L"q6a";
this->q6a->Size = System::Drawing::Size(92, 20);
this->q6a->TabIndex = 8;
this->q6a->TabStop = true;
this->q6a->Text = L"A) 1,465.75";
this->q6a->UseVisualStyleBackColor = false;
//
// panel5
//
this->panel5->BackColor = System::Drawing::Color::Transparent;
this->panel5->Controls->Add(this->q3d);
this->panel5->Controls->Add(this->q3b);
this->panel5->Controls->Add(this->q3c);
this->panel5->Controls->Add(this->q3a);
this->panel5->Controls->Add(this->label5);
this->panel5->Controls->Add(this->label6);
this->panel5->Dock = System::Windows::Forms::DockStyle::Top;
this->panel5->Location = System::Drawing::Point(0, 237);
this->panel5->Name = L"panel5";
this->panel5->Size = System::Drawing::Size(594, 100);
this->panel5->TabIndex = 10;
//
// q3d
//
this->q3d->AutoSize = true;

```

```

this->q3d->BackColor = System::Drawing::Color::Transparent;
this->q3d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3d->Location = System::Drawing::Point(285, 65);
this->q3d->Name = L"q3d";
this->q3d->Size = System::Drawing::Size(56, 20);
this->q3d->TabIndex = 11;
this->q3d->TabStop = true;
this->q3d->Text = L"D) 80";
this->q3d->UseVisualStyleBackColor = false;
//
// q3b
//
this->q3b->AutoSize = true;
this->q3b->BackColor = System::Drawing::Color::Transparent;
this->q3b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3b->Location = System::Drawing::Point(126, 66);
this->q3b->Name = L"q3b";
this->q3b->Size = System::Drawing::Size(56, 20);
this->q3b->TabIndex = 10;
this->q3b->TabStop = true;
this->q3b->Text = L"B) 40";
this->q3b->UseVisualStyleBackColor = false;
//
// q3c
//
this->q3c->AutoSize = true;
this->q3c->BackColor = System::Drawing::Color::Transparent;
this->q3c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3c->Location = System::Drawing::Point(285, 45);
this->q3c->Name = L"q3c";
this->q3c->Size = System::Drawing::Size(56, 20);
this->q3c->TabIndex = 9;
this->q3c->TabStop = true;
this->q3c->Text = L"C) 71";
this->q3c->UseVisualStyleBackColor = false;
//
// q3a
//
this->q3a->AutoSize = true;
this->q3a->BackColor = System::Drawing::Color::Transparent;
this->q3a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3a->Location = System::Drawing::Point(126, 46);

```

```

this->q3a->Name = L"q3a";
this->q3a->Size = System::Drawing::Size(56, 20);
this->q3a->TabIndex = 8;
this->q3a->TabStop = true;
this->q3a->Text = L"A) 22";
this->q3a->UseVisualStyleBackColor = false;
//
// label5
//
this->label5->BackColor = System::Drawing::Color::DarkSlateGray;
this->label5->Dock = System::Windows::Forms::DockStyle::Top;
this->label5->ForeColor = System::Drawing::Color::Black;
this->label5->Location = System::Drawing::Point(41, 0);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(553, 37);
this->label5->TabIndex = 7;
this->label5->Text = L"The formula: q= pc+ab, when substituted with
a=5, b=10, c=3 and p=7, would make q"
L" to be,";
this->label5->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label6
//
this->label6->BackColor = System::Drawing::Color::DarkSlateGray;
this->label6->Dock = System::Windows::Forms::DockStyle::Left;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label6->ForeColor = System::Drawing::Color::White;
this->label6->Location = System::Drawing::Point(0, 0);
this->label6->Name = L"label6";
this->label6->Size = System::Drawing::Size(41, 100);
this->label6->TabIndex = 6;
this->label6->Text = L"Q3";
this->label6->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// label11
//
this->label11->BackColor = System::Drawing::Color::DarkSlateGray;
this->label11->Dock = System::Windows::Forms::DockStyle::Left;
this->label11->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label11->ForeColor = System::Drawing::Color::White;
this->label11->Location = System::Drawing::Point(0, 0);
this->label11->Name = L"label11";
this->label11->Size = System::Drawing::Size(41, 100);
this->label11->TabIndex = 6;
this->label11->Text = L"Q5";
this->label11->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// q1d
//
this->q1d->AutoSize = true;
this->q1d->BackColor = System::Drawing::Color::Transparent;

```

```

this->q1d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1d->Location = System::Drawing::Point(320, 69);
this->q1d->Name = L"q1d";
this->q1d->Size = System::Drawing::Size(38, 20);
this->q1d->TabIndex = 5;
this->q1d->TabStop = true;
this->q1d->Text = L"D");
this->q1d->UseVisualStyleBackColor = false;
//
// q1b
//
this->q1b->AutoSize = true;
this->q1b->BackColor = System::Drawing::Color::Transparent;
this->q1b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1b->Location = System::Drawing::Point(126, 70);
this->q1b->Name = L"q1b";
this->q1b->Size = System::Drawing::Size(38, 20);
this->q1b->TabIndex = 4;
this->q1b->TabStop = true;
this->q1b->Text = L"B");
this->q1b->UseVisualStyleBackColor = false;
//
// q1c
//
this->q1c->AutoSize = true;
this->q1c->BackColor = System::Drawing::Color::Transparent;
this->q1c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1c->Location = System::Drawing::Point(320, 45);
this->q1c->Name = L"q1c";
this->q1c->Size = System::Drawing::Size(38, 20);
this->q1c->TabIndex = 3;
this->q1c->TabStop = true;
this->q1c->Text = L"C");
this->q1c->UseVisualStyleBackColor = false;
//
// q1a
//
this->q1a->AutoSize = true;
this->q1a->BackColor = System::Drawing::Color::Transparent;
this->q1a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1a->Location = System::Drawing::Point(126, 46);
this->q1a->Name = L"q1a";

```

```

this->q1a->Size = System::Drawing::Size(38, 20);
this->q1a->TabIndex = 2;
this->q1a->TabStop = true;
this->q1a->Text = L"A)";
this->q1a->UseVisualStyleBackColor = false;
//
// label1
//
this->label1->BackColor = System::Drawing::Color::DarkSlateGray;
this->label1->Dock = System::Windows::Forms::DockStyle::Left;
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label1->ForeColor = System::Drawing::Color::White;
this->label1->Location = System::Drawing::Point(0, 0);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(41, 100);
this->label1->TabIndex = 0;
this->label1->Text = L"Q1";
this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// q2d
//
this->q2d->AutoSize = true;
this->q2d->BackColor = System::Drawing::Color::Transparent;
this->q2d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q2d->Location = System::Drawing::Point(284, 99);
this->q2d->Name = L"q2d";
this->q2d->Size = System::Drawing::Size(38, 20);
this->q2d->TabIndex = 11;
this->q2d->TabStop = true;
this->q2d->Text = L"D)";
this->q2d->UseVisualStyleBackColor = false;
//
// q2b
//
this->q2b->AutoSize = true;
this->q2b->BackColor = System::Drawing::Color::Transparent;
this->q2b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q2b->Location = System::Drawing::Point(123, 101);
this->q2b->Name = L"q2b";
this->q2b->Size = System::Drawing::Size(38, 20);
this->q2b->TabIndex = 10;
this->q2b->TabStop = true;
this->q2b->Text = L"B)";
this->q2b->UseVisualStyleBackColor = false;
//
// q2c
//

```

```

this->q2c->AutoSize = true;
this->q2c->BackColor = System::Drawing::Color::Transparent;
this->q2c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q2c->Location = System::Drawing::Point(285, 45);
this->q2c->Name = L"q2c";
this->q2c->Size = System::Drawing::Size(38, 20);
this->q2c->TabIndex = 9;
this->q2c->TabStop = true;
this->q2c->Text = L"C";
this->q2c->UseVisualStyleBackColor = false;
//
// panel2
//
this->panel2->BackColor = System::Drawing::Color::Transparent;
this->panel2->Controls->Add(this->pictureBox5);
this->panel2->Controls->Add(this->pictureBox4);
this->panel2->Controls->Add(this->pictureBox3);
this->panel2->Controls->Add(this->pictureBox2);
this->panel2->Controls->Add(this->pictureBox1);
this->panel2->Controls->Add(this->q1d);
this->panel2->Controls->Add(this->q1b);
this->panel2->Controls->Add(this->q1c);
this->panel2->Controls->Add(this->q1a);
this->panel2->Controls->Add(this->label12);
this->panel2->Controls->Add(this->label11);
this->panel2->Dock = System::Windows::Forms::DockStyle::Top;
this->panel2->Location = System::Drawing::Point(0, 0);
this->panel2->Name = L"panel2";
this->panel2->Size = System::Drawing::Size(594, 100);
this->panel2->TabIndex = 8;
//
// pictureBox5
//
this->pictureBox5->BackColor = System::Drawing::Color::Transparent;
this->pictureBox5->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox5.BackgroundImage")));
this->pictureBox5->Location = System::Drawing::Point(354, 72);
this->pictureBox5->Name = L"pictureBox5";
this->pictureBox5->Size = System::Drawing::Size(100, 18);
this->pictureBox5->TabIndex = 10;
this->pictureBox5->TabStop = false;
//
// pictureBox4
//
this->pictureBox4->BackColor = System::Drawing::Color::Transparent;
this->pictureBox4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox4.BackgroundImage")));
this->pictureBox4->Location = System::Drawing::Point(354, 48);
this->pictureBox4->Name = L"pictureBox4";
this->pictureBox4->Size = System::Drawing::Size(100, 18);
this->pictureBox4->TabIndex = 9;
this->pictureBox4->TabStop = false;

```

```

//
// pictureBox3
//
this->pictureBox3->BackColor = System::Drawing::Color::Transparent;
this->pictureBox3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox3.BackgroundImage")));
this->pictureBox3->Location = System::Drawing::Point(159, 70);
this->pictureBox3->Name = L"pictureBox3";
this->pictureBox3->Size = System::Drawing::Size(100, 18);
this->pictureBox3->TabIndex = 8;
this->pictureBox3->TabStop = false;
//
// pictureBox2
//
this->pictureBox2->BackColor = System::Drawing::Color::Transparent;
this->pictureBox2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox2.BackgroundImage")));
this->pictureBox2->Location = System::Drawing::Point(159, 48);
this->pictureBox2->Name = L"pictureBox2";
this->pictureBox2->Size = System::Drawing::Size(100, 18);
this->pictureBox2->TabIndex = 7;
this->pictureBox2->TabStop = false;
//
// pictureBox1
//
this->pictureBox1->BackColor =
System::Drawing::Color::DarkSlateGray;
this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
this->pictureBox1->Location = System::Drawing::Point(296, 11);
this->pictureBox1->Name = L"pictureBox1";
this->pictureBox1->Size = System::Drawing::Size(100, 18);
this->pictureBox1->TabIndex = 6;
this->pictureBox1->TabStop = false;
//
// label2
//
this->label2->BackColor = System::Drawing::Color::DarkSlateGray;
this->label2->Dock = System::Windows::Forms::DockStyle::Top;
this->label2->ForeColor = System::Drawing::Color::Black;
this->label2->Location = System::Drawing::Point(41, 0);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(553, 37);
this->label2->TabIndex = 1;
this->label2->Text = L"The correct way to make r the subject of the
formula:
"
L"      is, ";
this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// q2a
//
this->q2a->AutoSize = true;
this->q2a->BackColor = System::Drawing::Color::Transparent;
this->q2a->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

        this->q2a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q2a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q2a->Location = System::Drawing::Point(124, 56);
        this->q2a->Name = L"q2a";
        this->q2a->Size = System::Drawing::Size(38, 20);
        this->q2a->TabIndex = 8;
        this->q2a->TabStop = true;
        this->q2a->Text = L"A");
        this->q2a->UseVisualStyleBackColor = false;
    //
    // label4
    //
    this->label4->BackColor = System::Drawing::Color::DarkSlateGray;
    this->label4->Dock = System::Windows::Forms::DockStyle::Left;
    this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
    this->label4->ForeColor = System::Drawing::Color::White;
    this->label4->Location = System::Drawing::Point(0, 0);
    this->label4->Name = L"label4";
    this->label4->Size = System::Drawing::Size(41, 137);
    this->label4->TabIndex = 6;
    this->label4->Text = L"Q2";
    this->label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // panel4
    //
    this->panel4->BackColor = System::Drawing::Color::Transparent;
    this->panel4->Controls->Add(this->pictureBox10);
    this->panel4->Controls->Add(this->pictureBox9);
    this->panel4->Controls->Add(this->pictureBox8);
    this->panel4->Controls->Add(this->pictureBox7);
    this->panel4->Controls->Add(this->pictureBox6);
    this->panel4->Controls->Add(this->q2d);
    this->panel4->Controls->Add(this->q2b);
    this->panel4->Controls->Add(this->q2c);
    this->panel4->Controls->Add(this->q2a);
    this->panel4->Controls->Add(this->label13);
    this->panel4->Controls->Add(this->label14);
    this->panel4->Dock = System::Windows::Forms::DockStyle::Top;
    this->panel4->Location = System::Drawing::Point(0, 100);
    this->panel4->Name = L"panel4";
    this->panel4->Size = System::Drawing::Size(594, 137);
    this->panel4->TabIndex = 9;
    //
    // pictureBox10
    //
    this->pictureBox10->BackColor = System::Drawing::Color::Transparent;
    this->pictureBox10->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox10.BackgroundImage")));
    this->pictureBox10->Location = System::Drawing::Point(321, 88);
    this->pictureBox10->Name = L"pictureBox10";
    this->pictureBox10->Size = System::Drawing::Size(61, 37);
    this->pictureBox10->TabIndex = 15;

```

```

    this->pictureBox10->TabStop = false;
    //
    // pictureBox9
    //
    this->pictureBox9->BackColor = System::Drawing::Color::Transparent;
    this->pictureBox9->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox9.BackgroundImage")));
    this->pictureBox9->Location = System::Drawing::Point(320, 48);
    this->pictureBox9->Name = L"pictureBox9";
    this->pictureBox9->Size = System::Drawing::Size(71, 18);
    this->pictureBox9->TabIndex = 14;
    this->pictureBox9->TabStop = false;
    //
    // pictureBox8
    //
    this->pictureBox8->BackColor = System::Drawing::Color::Transparent;
    this->pictureBox8->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox8.BackgroundImage")));
    this->pictureBox8->Location = System::Drawing::Point(157, 102);
    this->pictureBox8->Name = L"pictureBox8";
    this->pictureBox8->Size = System::Drawing::Size(71, 18);
    this->pictureBox8->TabIndex = 13;
    this->pictureBox8->TabStop = false;
    //
    // pictureBox7
    //
    this->pictureBox7->BackColor = System::Drawing::Color::Transparent;
    this->pictureBox7->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox7.BackgroundImage")));
    this->pictureBox7->Location = System::Drawing::Point(159, 48);
    this->pictureBox7->Name = L"pictureBox7";
    this->pictureBox7->Size = System::Drawing::Size(52, 37);
    this->pictureBox7->TabIndex = 11;
    this->pictureBox7->TabStop = false;
    //
    // pictureBox6
    //
    this->pictureBox6->BackColor =
System::Drawing::Color::DarkSlateGray;
    this->pictureBox6->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox6.BackgroundImage")));
    this->pictureBox6->Location = System::Drawing::Point(248, 10);
    this->pictureBox6->Name = L"pictureBox6";
    this->pictureBox6->Size = System::Drawing::Size(65, 18);
    this->pictureBox6->TabIndex = 12;
    this->pictureBox6->TabStop = false;
    //
    // label3
    //
    this->label3->BackColor = System::Drawing::Color::DarkSlateGray;
    this->label3->Dock = System::Windows::Forms::DockStyle::Top;
    this->label3->ForeColor = System::Drawing::Color::Black;
    this->label3->Location = System::Drawing::Point(41, 0);
    this->label3->Name = L"label3";

```

```

        this->label3->Size = System::Drawing::Size(553, 37);
        this->label3->TabIndex = 7;
        this->label3->Text = L"When c is made the subject of the formula:
, it would become"
                L", ";
        this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label12
        //
        this->label12->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label12->Dock = System::Windows::Forms::DockStyle::Top;
        this->label12->ForeColor = System::Drawing::Color::Black;
        this->label12->Location = System::Drawing::Point(41, 0);
        this->label12->Name = L"label12";
        this->label12->Size = System::Drawing::Size(553, 37);
        this->label12->TabIndex = 7;
        this->label12->Text = L"After substituting g=57 and h=34, p=98 and
r=32 in the formula: Q= gh2/pr, Q woul"
                L"d be,";
        this->label12-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // ttip
        //
        this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
        this->ttip->ForeColor = System::Drawing::Color::White;
        this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
        this->ttip->ToolTipTitle = L"MOLE Advisor";
        //
        // panel1
        //
        this->panel1->AutoScroll = true;
        this->panel1->BackColor = System::Drawing::Color::White;
        this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
        this->panel1->Controls->Add(this->panel7);
        this->panel1->Controls->Add(this->panel19);
        this->panel1->Controls->Add(this->panel10);
        this->panel1->Controls->Add(this->panel11);
        this->panel1->Controls->Add(this->panel12);
        this->panel1->Controls->Add(this->panel18);
        this->panel1->Controls->Add(this->panel16);
        this->panel1->Controls->Add(this->panel15);
        this->panel1->Controls->Add(this->panel14);
        this->panel1->Controls->Add(this->panel12);
        this->panel1->Location = System::Drawing::Point(3, 88);
        this->panel1->Name = L"panel1";
        this->panel1->Size = System::Drawing::Size(611, 338);
        this->panel1->TabIndex = 11;
        //
        // panel7
        //
        this->panel7->BackColor = System::Drawing::Color::Transparent;
        this->panel7->Controls->Add(this->q10d);
        this->panel7->Controls->Add(this->q10b);
        this->panel7->Controls->Add(this->q10c);

```

```

this->panel7->Controls->Add(this->q10a);
this->panel7->Controls->Add(this->label20);
this->panel7->Controls->Add(this->label21);
this->panel7->Dock = System::Windows::Forms::DockStyle::Top;
this->panel7->Location = System::Drawing::Point(0, 960);
this->panel7->Name = L"panel7";
this->panel7->Size = System::Drawing::Size(594, 100);
this->panel7->TabIndex = 18;
//
// q10d
//
this->q10d->AutoSize = true;
this->q10d->BackColor = System::Drawing::Color::Transparent;
this->q10d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10d->Location = System::Drawing::Point(285, 65);
this->q10d->Name = L"q10d";
this->q10d->Size = System::Drawing::Size(72, 20);
this->q10d->TabIndex = 11;
this->q10d->TabStop = true;
this->q10d->Text = L"D) c= 9f";
this->q10d->UseVisualStyleBackColor = false;
//
// q10b
//
this->q10b->AutoSize = true;
this->q10b->BackColor = System::Drawing::Color::Transparent;
this->q10b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10b->Location = System::Drawing::Point(126, 66);
this->q10b->Name = L"q10b";
this->q10b->Size = System::Drawing::Size(106, 20);
this->q10b->TabIndex = 10;
this->q10b->TabStop = true;
this->q10b->Text = L"B) c= 5f+5f-2f";
this->q10b->UseVisualStyleBackColor = false;
//
// q10c
//
this->q10c->AutoSize = true;
this->q10c->BackColor = System::Drawing::Color::Transparent;
this->q10c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10c->Location = System::Drawing::Point(285, 45);
this->q10c->Name = L"q10c";
this->q10c->Size = System::Drawing::Size(106, 20);
this->q10c->TabIndex = 9;
this->q10c->TabStop = true;
this->q10c->Text = L"C) c= 4f+7f-2f";

```

```

this->q10c->UseVisualStyleBackColor = false;
//
// q10a
//
this->q10a->AutoSize = true;
this->q10a->BackColor = System::Drawing::Color::Transparent;
this->q10a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q10a->Location = System::Drawing::Point(126, 46);
this->q10a->Name = L"q10a";
this->q10a->Size = System::Drawing::Size(102, 20);
this->q10a->TabIndex = 8;
this->q10a->TabStop = true;
this->q10a->Text = L"A) c=4f+7t-2f";
this->q10a->UseVisualStyleBackColor = false;
//
// label20
//
this->label20->BackColor = System::Drawing::Color::DarkSlateGray;
this->label20->Dock = System::Windows::Forms::DockStyle::Top;
this->label20->ForeColor = System::Drawing::Color::Black;
this->label20->Location = System::Drawing::Point(41, 0);
this->label20->Name = L"label20";
this->label20->Size = System::Drawing::Size(553, 37);
this->label20->TabIndex = 7;
this->label20->Text = resources->GetString(L"label20.Text");
this->label20-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label21
//
this->label21->BackColor = System::Drawing::Color::DarkSlateGray;
this->label21->Dock = System::Windows::Forms::DockStyle::Left;
this->label21->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label21->ForeColor = System::Drawing::Color::White;
this->label21->Location = System::Drawing::Point(0, 0);
this->label21->Name = L"label21";
this->label21->Size = System::Drawing::Size(41, 100);
this->label21->TabIndex = 6;
this->label21->Text = L"Q10";
this->label21-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel9
//
this->panel9->BackColor = System::Drawing::Color::Transparent;
this->panel9->Controls->Add(this->pictureBox12);
this->panel9->Controls->Add(this->q9d);
this->panel9->Controls->Add(this->q9b);
this->panel9->Controls->Add(this->q9c);
this->panel9->Controls->Add(this->q9a);
this->panel9->Controls->Add(this->label18);
this->panel9->Controls->Add(this->label19);

```

```

this->panel9->Dock = System::Windows::Forms::DockStyle::Top;
this->panel9->Location = System::Drawing::Point(0, 837);
this->panel9->Name = L"panel9";
this->panel9->Size = System::Drawing::Size(594, 123);
this->panel9->TabIndex = 17;
//
// pictureBox12
//
this->pictureBox12->BackColor =
System::Drawing::Color::DarkSlateGray;
this->pictureBox12->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox12.BackgroundImage")));
this->pictureBox12->Location = System::Drawing::Point(476, 9);
this->pictureBox12->Name = L"pictureBox12";
this->pictureBox12->Size = System::Drawing::Size(65, 18);
this->pictureBox12->TabIndex = 14;
this->pictureBox12->TabStop = false;
//
// q9d
//
this->q9d->AutoSize = true;
this->q9d->BackColor = System::Drawing::Color::Transparent;
this->q9d->Cursor = System::Windows::Forms::.Cursors::Hand;
this->q9d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q9d->Location = System::Drawing::Point(285, 85);
this->q9d->Name = L"q9d";
this->q9d->Size = System::Drawing::Size(75, 20);
this->q9d->TabIndex = 11;
this->q9d->TabStop = true;
this->q9d->Text = L"D) 27cm";
this->q9d->UseVisualStyleBackColor = false;
//
// q9b
//
this->q9b->AutoSize = true;
this->q9b->BackColor = System::Drawing::Color::Transparent;
this->q9b->Cursor = System::Windows::Forms::.Cursors::Hand;
this->q9b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q9b->Location = System::Drawing::Point(126, 86);
this->q9b->Name = L"q9b";
this->q9b->Size = System::Drawing::Size(75, 20);
this->q9b->TabIndex = 10;
this->q9b->TabStop = true;
this->q9b->Text = L"B) 76cm";
this->q9b->UseVisualStyleBackColor = false;
//
// q9c
//
this->q9c->AutoSize = true;
this->q9c->BackColor = System::Drawing::Color::Transparent;
this->q9c->Cursor = System::Windows::Forms::.Cursors::Hand;

```

```

        this->q9c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q9c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q9c->Location = System::Drawing::Point(285, 65);
        this->q9c->Name = L"q9c";
        this->q9c->Size = System::Drawing::Size(93, 20);
        this->q9c->TabIndex = 9;
        this->q9c->TabStop = true;
        this->q9c->Text = L"C) 37.68cm";
        this->q9c->UseVisualStyleBackColor = false;
        //
        // q9a
        //
        this->q9a->AutoSize = true;
        this->q9a->BackColor = System::Drawing::Color::Transparent;
        this->q9a->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q9a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q9a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q9a->Location = System::Drawing::Point(126, 66);
        this->q9a->Name = L"q9a";
        this->q9a->Size = System::Drawing::Size(75, 20);
        this->q9a->TabIndex = 8;
        this->q9a->TabStop = true;
        this->q9a->Text = L"A) 56cm";
        this->q9a->UseVisualStyleBackColor = false;
        //
        // label18
        //
        this->label18->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label18->Dock = System::Windows::Forms::DockStyle::Top;
        this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label18->ForeColor = System::Drawing::Color::Black;
        this->label18->Location = System::Drawing::Point(41, 0);
        this->label18->Name = L"label18";
        this->label18->Size = System::Drawing::Size(553, 51);
        this->label18->TabIndex = 7;
        this->label18->Text = L"Keheliya wants to find the circumference of
his china-plate from the well-known f"
        L"ormula: . If he found out that r=6cm
and that  $\pi$  is 3.14, wh"
        L"at is c\? \r\n";
        this->label18->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label19
        //
        this->label19->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label19->Dock = System::Windows::Forms::DockStyle::Left;
        this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label19->ForeColor = System::Drawing::Color::White;
        this->label19->Location = System::Drawing::Point(0, 0);

```

```

this->label19->Name = L"label19";
this->label19->Size = System::Drawing::Size(41, 123);
this->label19->TabIndex = 6;
this->label19->Text = L"Q9";
this->label19-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel10
//
this->panel10->BackColor = System::Drawing::Color::Transparent;
this->panel10->Controls->Add(this->pictureBox11);
this->panel10->Controls->Add(this->q8d);
this->panel10->Controls->Add(this->q8b);
this->panel10->Controls->Add(this->q8c);
this->panel10->Controls->Add(this->q8a);
this->panel10->Controls->Add(this->label16);
this->panel10->Controls->Add(this->label17);
this->panel10->Dock = System::Windows::Forms::DockStyle::Top;
this->panel10->Location = System::Drawing::Point(0, 737);
this->panel10->Name = L"panel10";
this->panel10->Size = System::Drawing::Size(594, 100);
this->panel10->TabIndex = 16;
//
// pictureBox11
//
this->pictureBox11->BackColor =
System::Drawing::Color::DarkSlateGray;
this->pictureBox11->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox11.BackgroundImage")));
this->pictureBox11->Location = System::Drawing::Point(145, 17);
this->pictureBox11->Name = L"pictureBox11";
this->pictureBox11->Size = System::Drawing::Size(65, 18);
this->pictureBox11->TabIndex = 13;
this->pictureBox11->TabStop = false;
//
// q8d
//
this->q8d->AutoSize = true;
this->q8d->BackColor = System::Drawing::Color::Transparent;
this->q8d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q8d->Location = System::Drawing::Point(285, 65);
this->q8d->Name = L"q8d";
this->q8d->Size = System::Drawing::Size(108, 20);
this->q8d->TabIndex = 11;
this->q8d->TabStop = true;
this->q8d->Text = L"D) 12,872 cm³\r\n";
this->q8d->UseVisualStyleBackColor = false;
//
// q8b
//
this->q8b->AutoSize = true;
this->q8b->BackColor = System::Drawing::Color::Transparent;
this->q8b->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

        this->q8b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q8b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q8b->Location = System::Drawing::Point(126, 66);
        this->q8b->Name = L"q8b";
        this->q8b->Size = System::Drawing::Size(119, 20);
        this->q8b->TabIndex = 10;
        this->q8b->TabStop = true;
        this->q8b->Text = L"B) 3,052.08 cm³\r\n";
        this->q8b->UseVisualStyleBackColor = false;
        //
        // q8c
        //
        this->q8c->AutoSize = true;
        this->q8c->BackColor = System::Drawing::Color::Transparent;
        this->q8c->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q8c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q8c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q8c->Location = System::Drawing::Point(285, 45);
        this->q8c->Name = L"q8c";
        this->q8c->Size = System::Drawing::Size(101, 20);
        this->q8c->TabIndex = 9;
        this->q8c->TabStop = true;
        this->q8c->Text = L"C) 9,567 cm³\r\n";
        this->q8c->UseVisualStyleBackColor = false;
        //
        // q8a
        //
        this->q8a->AutoSize = true;
        this->q8a->BackColor = System::Drawing::Color::Transparent;
        this->q8a->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q8a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q8a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q8a->Location = System::Drawing::Point(126, 46);
        this->q8a->Name = L"q8a";
        this->q8a->Size = System::Drawing::Size(108, 20);
        this->q8a->TabIndex = 8;
        this->q8a->TabStop = true;
        this->q8a->Text = L"A) 51,263 cm³\r\n";
        this->q8a->UseVisualStyleBackColor = false;
        //
        // label16
        //
        this->label16->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label16->Dock = System::Windows::Forms::DockStyle::Top;
        this->label16->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label16->ForeColor = System::Drawing::Color::Black;
        this->label16->Location = System::Drawing::Point(41, 0);
        this->label16->Name = L"label16";
        this->label16->Size = System::Drawing::Size(553, 37);
        this->label16->TabIndex = 7;

```

```

        this->label16->Text = resources->GetString(L"label16.Text");
        this->label16->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label17
        //
        this->label17->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label17->Dock = System::Windows::Forms::DockStyle::Left;
        this->label17->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label17->ForeColor = System::Drawing::Color::White;
        this->label17->Location = System::Drawing::Point(0, 0);
        this->label17->Name = L"label17";
        this->label17->Size = System::Drawing::Size(41, 100);
        this->label17->TabIndex = 6;
        this->label17->Text = L"Q8";
        this->label17->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // panel11
        //
        this->panel11->BackColor = System::Drawing::Color::Transparent;
        this->panel11->Controls->Add(this->q7d);
        this->panel11->Controls->Add(this->q7b);
        this->panel11->Controls->Add(this->q7c);
        this->panel11->Controls->Add(this->q7a);
        this->panel11->Controls->Add(this->label14);
        this->panel11->Controls->Add(this->label15);
        this->panel11->Dock = System::Windows::Forms::DockStyle::Top;
        this->panel11->Location = System::Drawing::Point(0, 637);
        this->panel11->Name = L"panel11";
        this->panel11->Size = System::Drawing::Size(594, 100);
        this->panel11->TabIndex = 15;
        //
        // q7d
        //
        this->q7d->AutoSize = true;
        this->q7d->BackColor = System::Drawing::Color::Transparent;
        this->q7d->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q7d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q7d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->q7d->Location = System::Drawing::Point(285, 65);
        this->q7d->Name = L"q7d";
        this->q7d->Size = System::Drawing::Size(92, 20);
        this->q7d->TabIndex = 11;
        this->q7d->TabStop = true;
        this->q7d->Text = L"D) 4,160.05";
        this->q7d->UseVisualStyleBackColor = false;
        //
        // q7b
        //
        this->q7b->AutoSize = true;
        this->q7b->BackColor = System::Drawing::Color::Transparent;
        this->q7b->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q7b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;

```

```

        this->q7b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->q7b->Location = System::Drawing::Point(126, 66);
        this->q7b->Name = L"q7b";
        this->q7b->Size = System::Drawing::Size(74, 20);
        this->q7b->TabIndex = 10;
        this->q7b->TabStop = true;
        this->q7b->Text = L"B) 4,200";
        this->q7b->UseVisualStyleBackColor = false;
//
// q7c
//
this->q7c->AutoSize = true;
this->q7c->BackColor = System::Drawing::Color::Transparent;
this->q7c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
this->q7c->Location = System::Drawing::Point(285, 45);
this->q7c->Name = L"q7c";
this->q7c->Size = System::Drawing::Size(92, 20);
this->q7c->TabIndex = 9;
this->q7c->TabStop = true;
this->q7c->Text = L"C) 4,284.20";
this->q7c->UseVisualStyleBackColor = false;
//
// q7a
//
this->q7a->AutoSize = true;
this->q7a->BackColor = System::Drawing::Color::Transparent;
this->q7a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
this->q7a->Location = System::Drawing::Point(126, 46);
this->q7a->Name = L"q7a";
this->q7a->Size = System::Drawing::Size(85, 20);
this->q7a->TabIndex = 8;
this->q7a->TabStop = true;
this->q7a->Text = L"A) 1,720.4";
this->q7a->UseVisualStyleBackColor = false;
//
// label14
//
this->label14->BackColor = System::Drawing::Color::DarkSlateGray;
this->label14->Dock = System::Windows::Forms::DockStyle::Top;
this->label14->ForeColor = System::Drawing::Color::Black;
this->label14->Location = System::Drawing::Point(41, 0);
this->label14->Name = L"label14";
this->label14->Size = System::Drawing::Size(553, 37);
this->label14->TabIndex = 7;
this->label14->Text = L"Find d for the formula: d= n÷2 x (c+b), when
n=44, b=56.2 and c=22,";
this->label14-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;

```

```

//
// label15
//
this->label15->BackColor = System::Drawing::Color::DarkSlateGray;
this->label15->Dock = System::Windows::Forms::DockStyle::Left;
this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label15->ForeColor = System::Drawing::Color::White;
this->label15->Location = System::Drawing::Point(0, 0);
this->label15->Name = L"label15";
this->label15->Size = System::Drawing::Size(41, 100);
this->label15->TabIndex = 6;
this->label15->Text = L"Q7";
this->label15-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel12
//
this->panel12->BackColor = System::Drawing::Color::Transparent;
this->panel12->Controls->Add(this->q6d);
this->panel12->Controls->Add(this->q6b);
this->panel12->Controls->Add(this->q6c);
this->panel12->Controls->Add(this->q6a);
this->panel12->Controls->Add(this->label12);
this->panel12->Controls->Add(this->label13);
this->panel12->Dock = System::Windows::Forms::DockStyle::Top;
this->panel12->Location = System::Drawing::Point(0, 537);
this->panel12->Name = L"panel12";
this->panel12->Size = System::Drawing::Size(594, 100);
this->panel12->TabIndex = 14;
//
// label13
//
this->label13->BackColor = System::Drawing::Color::DarkSlateGray;
this->label13->Dock = System::Windows::Forms::DockStyle::Left;
this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label13->ForeColor = System::Drawing::Color::White;
this->label13->Location = System::Drawing::Point(0, 0);
this->label13->Name = L"label13";
this->label13->Size = System::Drawing::Size(41, 100);
this->label13->TabIndex = 6;
this->label13->Text = L"Q6";
this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel8
//
this->panel8->BackColor = System::Drawing::Color::Transparent;
this->panel8->Controls->Add(this->q5d);
this->panel8->Controls->Add(this->q5b);
this->panel8->Controls->Add(this->q5c);
this->panel8->Controls->Add(this->q5a);
this->panel8->Controls->Add(this->label10);
this->panel8->Controls->Add(this->label11);
this->panel8->Dock = System::Windows::Forms::DockStyle::Top;

```

```

this->panel8->Location = System::Drawing::Point(0, 437);
this->panel8->Name = L"panel8";
this->panel8->Size = System::Drawing::Size(594, 100);
this->panel8->TabIndex = 13;
//
// ForU
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->ClientSize = System::Drawing::Size(623, 447);
this->Controls->Add(this->panel1);
this->ForeColor = System::Drawing::Color::Black;
this->MaximizeBox = false;
this->MinimizeBox = false;
this->Name = L"ForU";
this->ShowIcon = false;
this->ShowInTaskbar = false;
this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Show;
this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
this->Text = L"ForU";
this->SizeChanged += gcnew System::EventHandler(this,
&ForU::ForU_SizeChanged);
    this->panel6->ResumeLayout(false);
    this->panel6->PerformLayout();
    this->panel5->ResumeLayout(false);
    this->panel5->PerformLayout();
    this->panel2->ResumeLayout(false);
    this->panel2->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox5))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox4))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox3))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox2))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox1))->EndInit();
    this->panel4->ResumeLayout(false);
    this->panel4->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox10))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox9))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox8))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox7))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox6))->EndInit();
    this->panel1->ResumeLayout(false);
    this->panel7->ResumeLayout(false);
    this->panel7->PerformLayout();
    this->panel9->ResumeLayout(false);
    this->panel9->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox12))->EndInit();

```

```
        this->panel10->ResumeLayout(false);
        this->panel10->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox11))->EndInit();
        this->panel11->ResumeLayout(false);
        this->panel11->PerformLayout();
        this->panel12->ResumeLayout(false);
        this->panel12->PerformLayout();
        this->panel8->ResumeLayout(false);
        this->panel8->PerformLayout();
        this->ResumeLayout(false);

    }

#pragma endregion
    private: System::Void ForU_SizeChanged(System::Object^ sender, System::EventArgs^
e) {
    this->CenterToScreen();
}
};

}
```

7. freqD.cpp (Frequency Distribution)

Frequency Distribution

Frequency Distribution

Your Examination Progress

0:30:54

Exam in Progress

Current Exam Progress = 0 Last Exam Progress = 0

Q1- Q5 are based on the following:

A group of Students observed the Temperature (in Celsius) of a particular City for 2 weeks and have recorded their findings as follows-

x (Temperature)	f (No. of Days)
20	3
31	5
35	6

The most suitable value to be taken as the assumed mean (A) here is,

Q1

A) 6 C) 35
 B) 3 D) 2.5

The deviation (d) when $x=20$, under an assumed mean of 35 would be,

```
#include "freqD.h"
```

8. freqD.h (Frequency Distribution)

```
#pragma once
#include "CoreControls.h"

namespace mExams {

    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 freqD
    /// </summary>
public ref class freqD : public System::Windows::Forms::Form
{
public:
    Core ^ core;
    freqD(void)
    {
        InitializeComponent();
        core= gcnew Core("Frequency Distribution", this,"fd");
        setAnswer();
    }
    void setAnswer(){
        core->aSet[0]=q1c;
        core->aSet[1]=q2d;
        core->aSet[2]=q3b;
        core->aSet[3]=q4d;
        core->aSet[4]=q5a;
        core->aSet[5]=q6a;
        core->aSet[6]=q7b;
        core->aSet[7]=q8c;
        core->aSet[8]=q9d;
        core->aSet[9]=q10b;
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
~freqD()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::RadioButton^ q5d;
protected:
private: System::Windows::Forms::RadioButton^ q4d;
private: System::Windows::Forms::RadioButton^ q4b;
private: System::Windows::Forms::RadioButton^ q4c;
private: System::Windows::Forms::RadioButton^ q4a;
```

```
private: System::Windows::Forms::Label^  label7;
private: System::Windows::Forms::Label^  label8;
internal: System::Windows::Forms::Panel^  panel6;
private:
private: System::Windows::Forms::RadioButton^  q5b;
internal:
private: System::Windows::Forms::RadioButton^  q5c;
private: System::Windows::Forms::RadioButton^  q5a;
private: System::Windows::Forms::Label^  label10;
private: System::Windows::Forms::RadioButton^  q6d;
private: System::Windows::Forms::RadioButton^  q6b;
private: System::Windows::Forms::RadioButton^  q6c;
private: System::Windows::Forms::RadioButton^  q6a;
internal: System::Windows::Forms::Panel^  panel5;
private:
private: System::Windows::Forms::RadioButton^  q3d;
internal:
private: System::Windows::Forms::RadioButton^  q3b;
private: System::Windows::Forms::RadioButton^  q3c;
private: System::Windows::Forms::RadioButton^  q3a;
private: System::Windows::Forms::Label^  label5;
private: System::Windows::Forms::Label^  label6;
private: System::Windows::Forms::Label^  label11;
private: System::Windows::Forms::RadioButton^  q1d;
private: System::Windows::Forms::RadioButton^  q1b;
private: System::Windows::Forms::RadioButton^  q1c;
private: System::Windows::Forms::RadioButton^  q1a;
private: System::Windows::Forms::Label^  label1;
private: System::Windows::Forms::RadioButton^  q2d;
private: System::Windows::Forms::RadioButton^  q2b;
private: System::Windows::Forms::RadioButton^  q2c;
internal: System::Windows::Forms::Panel^  panel2;
private:
private: System::Windows::Forms::Label^  label2;
internal:
private: System::Windows::Forms::RadioButton^  q2a;
private: System::Windows::Forms::Label^  label4;
internal: System::Windows::Forms::Panel^  panel4;
private:
private: System::Windows::Forms::Label^  label3;
internal:
private: System::Windows::Forms::Label^  label12;
private: System::Windows::Forms::ToolTip^  ttip;
private: System::Windows::Forms::Panel^  panel1;
internal: System::Windows::Forms::Panel^  panel7;
private:
private: System::Windows::Forms::RadioButton^  q10d;
internal:
private: System::Windows::Forms::RadioButton^  q10b;
private: System::Windows::Forms::RadioButton^  q10c;
private: System::Windows::Forms::RadioButton^  q10a;
private: System::Windows::Forms::Label^  label20;
private: System::Windows::Forms::Label^  label21;
internal: System::Windows::Forms::Panel^  panel9;
private:
private: System::Windows::Forms::RadioButton^  q9d;
internal:
private: System::Windows::Forms::RadioButton^  q9b;
```

```

private: System::Windows::Forms::RadioButton^ q9c;
private: System::Windows::Forms::RadioButton^ q9a;
private: System::Windows::Forms::Label^ label18;
private: System::Windows::Forms::Label^ label19;
internal: System::Windows::Forms::Panel^ panel10;
private:
private: System::Windows::Forms::RadioButton^ q8d;
internal:
private: System::Windows::Forms::RadioButton^ q8b;
private: System::Windows::Forms::RadioButton^ q8c;
private: System::Windows::Forms::RadioButton^ q8a;
private: System::Windows::Forms::Label^ label16;
private: System::Windows::Forms::Label^ label17;
internal: System::Windows::Forms::Panel^ panel11;
private:
private: System::Windows::Forms::RadioButton^ q7d;
internal:
private: System::Windows::Forms::RadioButton^ q7b;
private: System::Windows::Forms::RadioButton^ q7c;
private: System::Windows::Forms::RadioButton^ q7a;
private: System::Windows::Forms::Label^ label14;
private: System::Windows::Forms::Label^ label15;
internal: System::Windows::Forms::Panel^ panel12;
private:
private: System::Windows::Forms::Label^ label13;
internal:
internal: System::Windows::Forms::Panel^ panel18;
private: System::Windows::Forms::Label^ label9;
private: System::Windows::Forms::Label^ label22;
private: System::Windows::Forms::PictureBox^ pictureBox1;
private: System::Windows::Forms::Label^ label23;
private: System::Windows::Forms::Label^ label24;
internal:
private:
private: System::ComponentModel::.IContainer^ components;
internal:

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        this->components = (gcnew System::ComponentModel::Container());
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(freqD::typeid));
        this->q5d = (gcnew System::Windows::Forms::RadioButton());
        this->q4d = (gcnew System::Windows::Forms::RadioButton());
        this->q4b = (gcnew System::Windows::Forms::RadioButton());
        this->q4c = (gcnew System::Windows::Forms::RadioButton());
        this->q4a = (gcnew System::Windows::Forms::RadioButton());
    }

```

```

this->label7 = (gcnew System::Windows::Forms::Label());
this->label8 = (gcnew System::Windows::Forms::Label());
this->panel6 = (gcnew System::Windows::Forms::Panel());
this->q5b = (gcnew System::Windows::Forms::RadioButton());
this->q5c = (gcnew System::Windows::Forms::RadioButton());
this->q5a = (gcnew System::Windows::Forms::RadioButton());
this->label10 = (gcnew System::Windows::Forms::Label());
this->q6d = (gcnew System::Windows::Forms::RadioButton());
this->q6b = (gcnew System::Windows::Forms::RadioButton());
this->q6c = (gcnew System::Windows::Forms::RadioButton());
this->q6a = (gcnew System::Windows::Forms::RadioButton());
this->panel5 = (gcnew System::Windows::Forms::Panel());
this->q3d = (gcnew System::Windows::Forms::RadioButton());
this->q3b = (gcnew System::Windows::Forms::RadioButton());
this->q3c = (gcnew System::Windows::Forms::RadioButton());
this->q3a = (gcnew System::Windows::Forms::RadioButton());
this->label5 = (gcnew System::Windows::Forms::Label());
this->label6 = (gcnew System::Windows::Forms::Label());
this->label11 = (gcnew System::Windows::Forms::Label());
this->q1d = (gcnew System::Windows::Forms::RadioButton());
this->q1b = (gcnew System::Windows::Forms::RadioButton());
this->q1c = (gcnew System::Windows::Forms::RadioButton());
this->q1a = (gcnew System::Windows::Forms::RadioButton());
this->label1 = (gcnew System::Windows::Forms::Label());
this->q2d = (gcnew System::Windows::Forms::RadioButton());
this->q2b = (gcnew System::Windows::Forms::RadioButton());
this->q2c = (gcnew System::Windows::Forms::RadioButton());
this->panel2 = (gcnew System::Windows::Forms::Panel());
this->label2 = (gcnew System::Windows::Forms::Label());
this->q2a = (gcnew System::Windows::Forms::RadioButton());
this->label14 = (gcnew System::Windows::Forms::Label());
this->panel4 = (gcnew System::Windows::Forms::Panel());
this->label3 = (gcnew System::Windows::Forms::Label());
this->label12 = (gcnew System::Windows::Forms::Label());
this->ttip = (gcnew System::Windows::Forms::ToolTip(this-
>components));
this->panel1 = (gcnew System::Windows::Forms::Panel());
this->panel7 = (gcnew System::Windows::Forms::Panel());
this->q10d = (gcnew System::Windows::Forms::RadioButton());
this->q10b = (gcnew System::Windows::Forms::RadioButton());
this->q10c = (gcnew System::Windows::Forms::RadioButton());
this->q10a = (gcnew System::Windows::Forms::RadioButton());
this->label20 = (gcnew System::Windows::Forms::Label());
this->label21 = (gcnew System::Windows::Forms::Label());
this->panel9 = (gcnew System::Windows::Forms::Panel());
this->q9d = (gcnew System::Windows::Forms::RadioButton());
this->q9b = (gcnew System::Windows::Forms::RadioButton());
this->q9c = (gcnew System::Windows::Forms::RadioButton());
this->q9a = (gcnew System::Windows::Forms::RadioButton());
this->label18 = (gcnew System::Windows::Forms::Label());
this->label19 = (gcnew System::Windows::Forms::Label());
this->panel10 = (gcnew System::Windows::Forms::Panel());
this->q8d = (gcnew System::Windows::Forms::RadioButton());
this->q8b = (gcnew System::Windows::Forms::RadioButton());
this->q8c = (gcnew System::Windows::Forms::RadioButton());
this->q8a = (gcnew System::Windows::Forms::RadioButton());
this->label16 = (gcnew System::Windows::Forms::Label());
this->label17 = (gcnew System::Windows::Forms::Label());

```

```

this->panel11 = (gcnew System::Windows::Forms::Panel());
this->q7d = (gcnew System::Windows::Forms::RadioButton());
this->q7b = (gcnew System::Windows::Forms::RadioButton());
this->q7c = (gcnew System::Windows::Forms::RadioButton());
this->q7a = (gcnew System::Windows::Forms::RadioButton());
this->label14 = (gcnew System::Windows::Forms::Label());
this->label15 = (gcnew System::Windows::Forms::Label());
this->panel12 = (gcnew System::Windows::Forms::Panel());
this->label13 = (gcnew System::Windows::Forms::Label());
this->panel8 = (gcnew System::Windows::Forms::Panel());
this->label9 = (gcnew System::Windows::Forms::Label());
this->label22 = (gcnew System::Windows::Forms::Label());
this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
this->label23 = (gcnew System::Windows::Forms::Label());
this->label24 = (gcnew System::Windows::Forms::Label());
this->panel6->SuspendLayout();
this->panel5->SuspendLayout();
this->panel2->SuspendLayout();
this->panel4->SuspendLayout();
this->panel1->SuspendLayout();
this->panel7->SuspendLayout();
this->panel9->SuspendLayout();
this->panel10->SuspendLayout();
this->panel11->SuspendLayout();
this->panel12->SuspendLayout();
this->panel8->SuspendLayout();
(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->pictureBox1))->BeginInit();
    this->SuspendLayout();
    //
    // q5d
    //
    this->q5d->AutoSize = true;
    this->q5d->BackColor = System::Drawing::Color::Transparent;
    this->q5d->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q5d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q5d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q5d->Location = System::Drawing::Point(285, 65);
    this->q5d->Name = L"q5d";
    this->q5d->Size = System::Drawing::Size(105, 20);
    this->q5d->TabIndex = 11;
    this->q5d->TabStop = true;
    this->q5d->Text = L"D) 41 Celsius";
    this->q5d->UseVisualStyleBackColor = false;
    //
    // q4d
    //
    this->q4d->AutoSize = true;
    this->q4d->BackColor = System::Drawing::Color::Transparent;
    this->q4d->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q4d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q4d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q4d->Location = System::Drawing::Point(285, 65);
    this->q4d->Name = L"q4d";

```

```

this->q4d->Size = System::Drawing::Size(106, 20);
this->q4d->TabIndex = 11;
this->q4d->TabStop = true;
this->q4d->Text = L"D) 14 and -65";
this->q4d->UseVisualStyleBackColor = false;
//
// q4b
//
this->q4b->AutoSize = true;
this->q4b->BackColor = System::Drawing::Color::Transparent;
this->q4b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q4b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4b->Location = System::Drawing::Point(126, 66);
this->q4b->Name = L"q4b";
this->q4b->Size = System::Drawing::Size(106, 20);
this->q4b->TabIndex = 10;
this->q4b->TabStop = true;
this->q4b->Text = L"B) -78 and 14";
this->q4b->UseVisualStyleBackColor = false;
//
// q4c
//
this->q4c->AutoSize = true;
this->q4c->BackColor = System::Drawing::Color::Transparent;
this->q4c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q4c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4c->Location = System::Drawing::Point(285, 45);
this->q4c->Name = L"q4c";
this->q4c->Size = System::Drawing::Size(101, 20);
this->q4c->TabIndex = 9;
this->q4c->TabStop = true;
this->q4c->Text = L"C) 56 and 11";
this->q4c->UseVisualStyleBackColor = false;
//
// q4a
//
this->q4a->AutoSize = true;
this->q4a->BackColor = System::Drawing::Color::Transparent;
this->q4a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q4a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4a->Location = System::Drawing::Point(126, 46);
this->q4a->Name = L"q4a";
this->q4a->Size = System::Drawing::Size(105, 20);
this->q4a->TabIndex = 8;
this->q4a->TabStop = true;
this->q4a->Text = L"A) 11 and -56";
this->q4a->UseVisualStyleBackColor = false;
//
// label7

```

```

//  

this->label7->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label7->Dock = System::Windows::Forms::DockStyle::Top;  

this->label7->ForeColor = System::Drawing::Color::Black;  

this->label7->Location = System::Drawing::Point(41, 0);  

this->label7->Name = L"label7";  

this->label7->Size = System::Drawing::Size(553, 37);  

this->label7->TabIndex = 7;  

this->label7->Text = L"Taking A to be 35, what would Σf and Σfd  

be\?";  

this->label7-> TextAlign =  

System::Drawing::ContentAlignment::MiddleLeft;  

//  

// label8  

//  

this->label8->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label8->Dock = System::Windows::Forms::DockStyle::Left;  

this->label8->Font = (gcnew System::Drawing::Font(L"Arial", 12,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->label8->ForeColor = System::Drawing::Color::White;  

this->label8->Location = System::Drawing::Point(0, 0);  

this->label8->Name = L"label8";  

this->label8->Size = System::Drawing::Size(41, 100);  

this->label8->TabIndex = 6;  

this->label8->Text = L"Q4";  

this->label8-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

//  

// panel6  

//  

this->panel6->BackColor = System::Drawing::Color::Transparent;  

this->panel6->Controls->Add(this->q4d);  

this->panel6->Controls->Add(this->q4b);  

this->panel6->Controls->Add(this->q4c);  

this->panel6->Controls->Add(this->q4a);  

this->panel6->Controls->Add(this->label7);  

this->panel6->Controls->Add(this->label8);  

this->panel6->Dock = System::Windows::Forms::DockStyle::Top;  

this->panel6->Location = System::Drawing::Point(0, 496);  

this->panel6->Name = L"panel6";  

this->panel6->Size = System::Drawing::Size(594, 100);  

this->panel6->TabIndex = 11;  

//  

// q5b  

//  

this->q5b->AutoSize = true;  

this->q5b->BackColor = System::Drawing::Color::Transparent;  

this->q5b->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q5b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q5b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q5b->Location = System::Drawing::Point(126, 66);  

this->q5b->Name = L"q5b";  

this->q5b->Size = System::Drawing::Size(105, 20);  

this->q5b->TabIndex = 10;  

this->q5b->TabStop = true;

```

```

this->q5b->Text = L"B) 32 Celsius";
this->q5b->UseVisualStyleBackColor = false;
//
// q5c
//
this->q5c->AutoSize = true;
this->q5c->BackColor = System::Drawing::Color::Transparent;
this->q5c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q5c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q5c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q5c->Location = System::Drawing::Point(285, 45);
this->q5c->Name = L"q5c";
this->q5c->Size = System::Drawing::Size(105, 20);
this->q5c->TabIndex = 9;
this->q5c->TabStop = true;
this->q5c->Text = L"C) 35 Celsius";
this->q5c->UseVisualStyleBackColor = false;
//
// q5a
//
this->q5a->AutoSize = true;
this->q5a->BackColor = System::Drawing::Color::Transparent;
this->q5a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q5a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q5a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q5a->Location = System::Drawing::Point(126, 46);
this->q5a->Name = L"q5a";
this->q5a->Size = System::Drawing::Size(105, 20);
this->q5a->TabIndex = 8;
this->q5a->TabStop = true;
this->q5a->Text = L"A) 30 Celsius";
this->q5a->UseVisualStyleBackColor = false;
//
// label10
//
this->label10->BackColor = System::Drawing::Color::DarkSlateGray;
this->label10->Dock = System::Windows::Forms::DockStyle::Top;
this->label10->ForeColor = System::Drawing::Color::Black;
this->label10->Location = System::Drawing::Point(41, 0);
this->label10->Name = L"label10";
this->label10->Size = System::Drawing::Size(553, 37);
this->label10->TabIndex = 7;
this->label10->Text = L"If A is 35, the mean temperature of the city
would be, ";
this->label10-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// q6d
//
this->q6d->AutoSize = true;
this->q6d->BackColor = System::Drawing::Color::Transparent;
this->q6d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;

```

```

    this->q6d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->q6d->Location = System::Drawing::Point(285, 140);
    this->q6d->Name = L"q6d";
    this->q6d->Size = System::Drawing::Size(67, 20);
    this->q6d->TabIndex = 11;
    this->q6d->TabStop = true;
    this->q6d->Text = L"D) 25.4";
    this->q6d->UseVisualStyleBackColor = false;
    //
    // q6b
    //
    this->q6b->AutoSize = true;
    this->q6b->BackColor = System::Drawing::Color::Transparent;
    this->q6b->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q6b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q6b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->q6b->Location = System::Drawing::Point(126, 141);
    this->q6b->Name = L"q6b";
    this->q6b->Size = System::Drawing::Size(56, 20);
    this->q6b->TabIndex = 10;
    this->q6b->TabStop = true;
    this->q6b->Text = L"B) 29";
    this->q6b->UseVisualStyleBackColor = false;
    //
    // q6c
    //
    this->q6c->AutoSize = true;
    this->q6c->BackColor = System::Drawing::Color::Transparent;
    this->q6c->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q6c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q6c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->q6c->Location = System::Drawing::Point(285, 120);
    this->q6c->Name = L"q6c";
    this->q6c->Size = System::Drawing::Size(67, 20);
    this->q6c->TabIndex = 9;
    this->q6c->TabStop = true;
    this->q6c->Text = L"C) 24.9";
    this->q6c->UseVisualStyleBackColor = false;
    //
    // q6a
    //
    this->q6a->AutoSize = true;
    this->q6a->BackColor = System::Drawing::Color::Transparent;
    this->q6a->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q6a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q6a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                                         static_cast<System::Byte>(0)));
    this->q6a->Location = System::Drawing::Point(126, 121);
    this->q6a->Name = L"q6a";
    this->q6a->Size = System::Drawing::Size(56, 20);
    this->q6a->TabIndex = 8;

```

```

this->q6a->TabStop = true;
this->q6a->Text = L"A) 27";
this->q6a->UseVisualStyleBackColor = false;
//
// panel5
//
this->panel5->BackColor = System::Drawing::Color::Transparent;
this->panel5->Controls->Add(this->q3d);
this->panel5->Controls->Add(this->q3b);
this->panel5->Controls->Add(this->q3c);
this->panel5->Controls->Add(this->q3a);
this->panel5->Controls->Add(this->label15);
this->panel5->Controls->Add(this->label16);
this->panel5->Dock = System::Windows::Forms::DockStyle::Top;
this->panel5->Location = System::Drawing::Point(0, 396);
this->panel5->Name = L"panel5";
this->panel5->Size = System::Drawing::Size(594, 100);
this->panel5->TabIndex = 10;
//
// q3d
//
this->q3d->AutoSize = true;
this->q3d->BackColor = System::Drawing::Color::Transparent;
this->q3d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3d->Location = System::Drawing::Point(285, 65);
this->q3d->Name = L"q3d";
this->q3d->Size = System::Drawing::Size(56, 20);
this->q3d->TabIndex = 11;
this->q3d->TabStop = true;
this->q3d->Text = L"D) 15";
this->q3d->UseVisualStyleBackColor = false;
//
// q3b
//
this->q3b->AutoSize = true;
this->q3b->BackColor = System::Drawing::Color::Transparent;
this->q3b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3b->Location = System::Drawing::Point(126, 66);
this->q3b->Name = L"q3b";
this->q3b->Size = System::Drawing::Size(60, 20);
this->q3b->TabIndex = 10;
this->q3b->TabStop = true;
this->q3b->Text = L"B) -20";
this->q3b->UseVisualStyleBackColor = false;
//
// q3c
//
this->q3c->AutoSize = true;
this->q3c->BackColor = System::Drawing::Color::Transparent;
this->q3c->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

this->q3c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3c->Location = System::Drawing::Point(285, 45);
this->q3c->Name = L"q3c";
this->q3c->Size = System::Drawing::Size(60, 20);
this->q3c->TabIndex = 9;
this->q3c->TabStop = true;
this->q3c->Text = L"C) -10";
this->q3c->UseVisualStyleBackColor = false;
//
// q3a
//
this->q3a->AutoSize = true;
this->q3a->BackColor = System::Drawing::Color::Transparent;
this->q3a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3a->Location = System::Drawing::Point(126, 46);
this->q3a->Name = L"q3a";
this->q3a->Size = System::Drawing::Size(49, 20);
this->q3a->TabIndex = 8;
this->q3a->TabStop = true;
this->q3a->Text = L"A) 6";
this->q3a->UseVisualStyleBackColor = false;
//
// label5
//
this->label5->BackColor = System::Drawing::Color::DarkSlateGray;
this->label5->Dock = System::Windows::Forms::DockStyle::Top;
this->label5->ForeColor = System::Drawing::Color::Black;
this->label5->Location = System::Drawing::Point(41, 0);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(553, 37);
this->label5->TabIndex = 7;
this->label5->Text = L"If the assumed mean is 35, what would fd be
when x=31?";
    this->label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
// label6
//
this->label6->BackColor = System::Drawing::Color::DarkSlateGray;
this->label6->Dock = System::Windows::Forms::DockStyle::Left;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label6->ForeColor = System::Drawing::Color::White;
this->label6->Location = System::Drawing::Point(0, 0);
this->label6->Name = L"label6";
this->label6->Size = System::Drawing::Size(41, 100);
this->label6->TabIndex = 6;
this->label6->Text = L"Q3";
this->label6-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

```

```

//
// label11
//
this->label11->BackColor = System::Drawing::Color::DarkSlateGray;
this->label11->Dock = System::Windows::Forms::DockStyle::Left;
this->label11->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label11->ForeColor = System::Drawing::Color::White;
this->label11->Location = System::Drawing::Point(0, 0);
this->label11->Name = L"label11";
this->label11->Size = System::Drawing::Size(41, 100);
this->label11->TabIndex = 6;
this->label11->Text = L"Q5";
this->label11-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// q1d
//
this->q1d->AutoSize = true;
this->q1d->BackColor = System::Drawing::Color::Transparent;
this->q1d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1d->Location = System::Drawing::Point(303, 265);
this->q1d->Name = L"q1d";
this->q1d->Size = System::Drawing::Size(60, 20);
this->q1d->TabIndex = 5;
this->q1d->TabStop = true;
this->q1d->Text = L"D) 2.5";
this->q1d->UseVisualStyleBackColor = false;
//
// q1b
//
this->q1b->AutoSize = true;
this->q1b->BackColor = System::Drawing::Color::Transparent;
this->q1b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1b->Location = System::Drawing::Point(144, 266);
this->q1b->Name = L"q1b";
this->q1b->Size = System::Drawing::Size(49, 20);
this->q1b->TabIndex = 4;
this->q1b->TabStop = true;
this->q1b->Text = L"B) 3";
this->q1b->UseVisualStyleBackColor = false;
//
// q1c
//
this->q1c->AutoSize = true;
this->q1c->BackColor = System::Drawing::Color::Transparent;
this->q1c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;

```

```

    this->q1c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q1c->Location = System::Drawing::Point(303, 245);
    this->q1c->Name = L"q1c";
    this->q1c->Size = System::Drawing::Size(56, 20);
    this->q1c->TabIndex = 3;
    this->q1c->TabStop = true;
    this->q1c->Text = L"C) 35";
    this->q1c->UseVisualStyleBackColor = false;
    //
    // q1a
    //
    this->q1a->AutoSize = true;
    this->q1a->BackColor = System::Drawing::Color::Transparent;
    this->q1a->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q1a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q1a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q1a->Location = System::Drawing::Point(144, 246);
    this->q1a->Name = L"q1a";
    this->q1a->Size = System::Drawing::Size(49, 20);
    this->q1a->TabIndex = 2;
    this->q1a->TabStop = true;
    this->q1a->Text = L"A) 6";
    this->q1a->UseVisualStyleBackColor = false;
    //
    // label1
    //
    this->label1->BackColor = System::Drawing::Color::DarkSlateGray;
    this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label1->ForeColor = System::Drawing::Color::White;
    this->label1->Location = System::Drawing::Point(0, 194);
    this->label1->Name = L"label1";
    this->label1->Size = System::Drawing::Size(41, 102);
    this->label1->TabIndex = 0;
    this->label1->Text = L"Q1";
    this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // q2d
    //
    this->q2d->AutoSize = true;
    this->q2d->BackColor = System::Drawing::Color::Transparent;
    this->q2d->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q2d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q2d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q2d->Location = System::Drawing::Point(285, 65);
    this->q2d->Name = L"q2d";
    this->q2d->Size = System::Drawing::Size(60, 20);
    this->q2d->TabIndex = 11;
    this->q2d->TabStop = true;
    this->q2d->Text = L"D) -15";

```

```

this->q2d->UseVisualStyleBackColor = false;
//
// q2b
//
this->q2b->AutoSize = true;
this->q2b->BackColor = System::Drawing::Color::Transparent;
this->q2b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q2b->Location = System::Drawing::Point(126, 66);
this->q2b->Name = L"q2b";
this->q2b->Size = System::Drawing::Size(49, 20);
this->q2b->TabIndex = 10;
this->q2b->TabStop = true;
this->q2b->Text = L"B) 5";
this->q2b->UseVisualStyleBackColor = false;
//
// q2c
//
this->q2c->AutoSize = true;
this->q2c->BackColor = System::Drawing::Color::Transparent;
this->q2c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q2c->Location = System::Drawing::Point(285, 45);
this->q2c->Name = L"q2c";
this->q2c->Size = System::Drawing::Size(60, 20);
this->q2c->TabIndex = 9;
this->q2c->TabStop = true;
this->q2c->Text = L"C) -10";
this->q2c->UseVisualStyleBackColor = false;
//
// panel2
//
this->panel2->BackColor = System::Drawing::Color::Transparent;
this->panel2->Controls->Add(this->label19);
this->panel2->Controls->Add(this->pictureBox1);
this->panel2->Controls->Add(this->label122);
this->panel2->Controls->Add(this->q1d);
this->panel2->Controls->Add(this->q1b);
this->panel2->Controls->Add(this->q1c);
this->panel2->Controls->Add(this->q1a);
this->panel2->Controls->Add(this->label12);
this->panel2->Controls->Add(this->label11);
this->panel2->Dock = System::Windows::Forms::DockStyle::Top;
this->panel2->Location = System::Drawing::Point(0, 0);
this->panel2->Name = L"panel2";
this->panel2->Size = System::Drawing::Size(594, 296);
this->panel2->TabIndex = 8;
//
// label2
//
this->label2->BackColor = System::Drawing::Color::Teal;
this->label2->Dock = System::Windows::Forms::DockStyle::Top;

```

```

        this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label2->ForeColor = System::Drawing::Color::Black;
        this->label2->Location = System::Drawing::Point(0, 0);
        this->label2->Name = L"label2";
        this->label2->Size = System::Drawing::Size(594, 27);
        this->label2->TabIndex = 1;
        this->label2->Text = L"Q1- Q5 are based on the following:";
        this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // q2a
        //
        this->q2a->AutoSize = true;
        this->q2a->BackColor = System::Drawing::Color::Transparent;
        this->q2a->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q2a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q2a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->q2a->Location = System::Drawing::Point(126, 46);
        this->q2a->Name = L"q2a";
        this->q2a->Size = System::Drawing::Size(60, 20);
        this->q2a->TabIndex = 8;
        this->q2a->TabStop = true;
        this->q2a->Text = L"A) -20";
        this->q2a->UseVisualStyleBackColor = false;
        //
        // label4
        //
        this->label4->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label4->Dock = System::Windows::Forms::DockStyle::Left;
        this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label4->ForeColor = System::Drawing::Color::White;
        this->label4->Location = System::Drawing::Point(0, 0);
        this->label4->Name = L"label4";
        this->label4->Size = System::Drawing::Size(41, 100);
        this->label4->TabIndex = 6;
        this->label4->Text = L"Q2";
        this->label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // panel4
        //
        this->panel4->BackColor = System::Drawing::Color::Transparent;
        this->panel4->Controls->Add(this->q2d);
        this->panel4->Controls->Add(this->q2b);
        this->panel4->Controls->Add(this->q2c);
        this->panel4->Controls->Add(this->q2a);
        this->panel4->Controls->Add(this->label13);
        this->panel4->Controls->Add(this->label14);
        this->panel4->Dock = System::Windows::Forms::DockStyle::Top;
        this->panel4->Location = System::Drawing::Point(0, 296);
        this->panel4->Name = L"panel4";
        this->panel4->Size = System::Drawing::Size(594, 100);

```

```

this->panel4->TabIndex = 9;
//
// label3
//
this->label3->BackColor = System::Drawing::Color::DarkSlateGray;
this->label3->Dock = System::Windows::Forms::DockStyle::Top;
this->label3->ForeColor = System::Drawing::Color::Black;
this->label3->Location = System::Drawing::Point(41, 0);
this->label3->Name = L"label3";
this->label3->Size = System::Drawing::Size(553, 37);
this->label3->TabIndex = 7;
this->label3->Text = L"The deviation (d) when x=20, under an assumed
mean of 35 would be, ";
this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label12
//
this->label12->BackColor = System::Drawing::Color::DarkSlateGray;
this->label12->ForeColor = System::Drawing::Color::Black;
this->label12->Location = System::Drawing::Point(38, 70);
this->label12->Name = L"label12";
this->label12->Size = System::Drawing::Size(553, 37);
this->label12->TabIndex = 7;
this->label12->Text = L"If the mid-value (x), needed to be
calculated here, what would it be for the tank"
L"s in the range of 25-29\?";
this->label12-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// ttip
//
this->ttip->BackColor = System::Drawing::Color::DarkSlateGray;
this->ttip->ForeColor = System::Drawing::Color::White;
this->ttip->ToolTipIcon = System::Windows::Forms::ToolTipIcon::Info;
this->ttip->ToolTipTitle = L"MOLE Advisor";
//
// panel1
//
this->panel1->AutoScroll = true;
this->panel1->BackColor = System::Drawing::Color::White;
this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage"))));
this->panel1->Controls->Add(this->panel17);
this->panel1->Controls->Add(this->panel19);
this->panel1->Controls->Add(this->panel10);
this->panel1->Controls->Add(this->panel11);
this->panel1->Controls->Add(this->panel12);
this->panel1->Controls->Add(this->panel18);
this->panel1->Controls->Add(this->panel16);
this->panel1->Controls->Add(this->panel15);
this->panel1->Controls->Add(this->panel14);
this->panel1->Controls->Add(this->panel12);
this->panel1->Location = System::Drawing::Point(3, 88);
this->panel1->Name = L"panel1";
this->panel1->Size = System::Drawing::Size(611, 338);
this->panel1->TabIndex = 11;

```

```

//  

// panel7  

//  

this->panel7->BackColor = System::Drawing::Color::Transparent;  

this->panel7->Controls->Add(this->q10d);  

this->panel7->Controls->Add(this->q10b);  

this->panel7->Controls->Add(this->q10c);  

this->panel7->Controls->Add(this->q10a);  

this->panel7->Controls->Add(this->label120);  

this->panel7->Controls->Add(this->label121);  

this->panel7->Dock = System::Windows::Forms::DockStyle::Top;  

this->panel7->Location = System::Drawing::Point(0, 1206);  

this->panel7->Name = L"panel7";  

this->panel7->Size = System::Drawing::Size(594, 100);  

this->panel7->TabIndex = 18;  

//  

// q10d  

//  

this->q10d->AutoSize = true;  

this->q10d->BackColor = System::Drawing::Color::Transparent;  

this->q10d->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q10d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q10d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q10d->Location = System::Drawing::Point(285, 65);  

this->q10d->Name = L"q10d";  

this->q10d->Size = System::Drawing::Size(56, 20);  

this->q10d->TabIndex = 11;  

this->q10d->TabStop = true;  

this->q10d->Text = L"D) 49";  

this->q10d->UseVisualStyleBackColor = false;  

//  

// q10b  

//  

this->q10b->AutoSize = true;  

this->q10b->BackColor = System::Drawing::Color::Transparent;  

this->q10b->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q10b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q10b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q10b->Location = System::Drawing::Point(126, 66);  

this->q10b->Name = L"q10b";  

this->q10b->Size = System::Drawing::Size(56, 20);  

this->q10b->TabIndex = 10;  

this->q10b->TabStop = true;  

this->q10b->Text = L"B) 28";  

this->q10b->UseVisualStyleBackColor = false;  

//  

// q10c  

//  

this->q10c->AutoSize = true;  

this->q10c->BackColor = System::Drawing::Color::Transparent;  

this->q10c->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q10c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q10c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,

```

```

        static_cast<System::Byte>(0)));
this->q10c->Location = System::Drawing::Point(285, 45);
this->q10c->Name = L"q10c";
this->q10c->Size = System::Drawing::Size(56, 20);
this->q10c->TabIndex = 9;
this->q10c->TabStop = true;
this->q10c->Text = L"C) 37";
this->q10c->UseVisualStyleBackColor = false;
//
// q10a
//
this->q10a->AutoSize = true;
this->q10a->BackColor = System::Drawing::Color::Transparent;
this->q10a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
this->q10a->Location = System::Drawing::Point(126, 46);
this->q10a->Name = L"q10a";
this->q10a->Size = System::Drawing::Size(56, 20);
this->q10a->TabIndex = 8;
this->q10a->TabStop = true;
this->q10a->Text = L"A) 21";
this->q10a->UseVisualStyleBackColor = false;
//
// label20
//
this->label20->BackColor = System::Drawing::Color::DarkSlateGray;
this->label20->Dock = System::Windows::Forms::DockStyle::Top;
this->label20->ForeColor = System::Drawing::Color::Black;
this->label20->Location = System::Drawing::Point(41, 0);
this->label20->Name = L"label20";
this->label20->Size = System::Drawing::Size(553, 37);
this->label20->TabIndex = 7;
this->label20->Text = L"The mean average sales of the factory would
be, ";
this->label20-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label21
//
this->label21->BackColor = System::Drawing::Color::DarkSlateGray;
this->label21->Dock = System::Windows::Forms::DockStyle::Left;
this->label21->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
this->label21->ForeColor = System::Drawing::Color::White;
this->label21->Location = System::Drawing::Point(0, 0);
this->label21->Name = L"label21";
this->label21->Size = System::Drawing::Size(41, 100);
this->label21->TabIndex = 6;
this->label21->Text = L"Q10";
this->label21-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel9
//

```

```

this->panel9->BackColor = System::Drawing::Color::Transparent;
this->panel9->Controls->Add(this->q9d);
this->panel9->Controls->Add(this->q9b);
this->panel9->Controls->Add(this->q9c);
this->panel9->Controls->Add(this->q9a);
this->panel9->Controls->Add(this->label18);
this->panel9->Controls->Add(this->label19);
this->panel9->Dock = System::Windows::Forms::DockStyle::Top;
this->panel9->Location = System::Drawing::Point(0, 1083);
this->panel9->Name = L"panel9";
this->panel9->Size = System::Drawing::Size(594, 123);
this->panel9->TabIndex = 17;
//
// q9d
//
this->q9d->AutoSize = true;
this->q9d->BackColor = System::Drawing::Color::Transparent;
this->q9d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q9d->Location = System::Drawing::Point(285, 85);
this->q9d->Name = L"q9d";
this->q9d->Size = System::Drawing::Size(70, 20);
this->q9d->TabIndex = 11;
this->q9d->TabStop = true;
this->q9d->Text = L"D) 1270";
this->q9d->UseVisualStyleBackColor = false;
//
// q9b
//
this->q9b->AutoSize = true;
this->q9b->BackColor = System::Drawing::Color::Transparent;
this->q9b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q9b->Location = System::Drawing::Point(126, 86);
this->q9b->Name = L"q9b";
this->q9b->Size = System::Drawing::Size(70, 20);
this->q9b->TabIndex = 10;
this->q9b->TabStop = true;
this->q9b->Text = L"B) 1322";
this->q9b->UseVisualStyleBackColor = false;
//
// q9c
//
this->q9c->AutoSize = true;
this->q9c->BackColor = System::Drawing::Color::Transparent;
this->q9c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q9c->Location = System::Drawing::Point(285, 65);
this->q9c->Name = L"q9c";

```

```

this->q9c->Size = System::Drawing::Size(70, 20);
this->q9c->TabIndex = 9;
this->q9c->TabStop = true;
this->q9c->Text = L"C) 1981";
this->q9c->UseVisualStyleBackColor = false;
//
// q9a
//
this->q9a->AutoSize = true;
this->q9a->BackColor = System::Drawing::Color::Transparent;
this->q9a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q9a->Location = System::Drawing::Point(126, 66);
this->q9a->Name = L"q9a";
this->q9a->Size = System::Drawing::Size(63, 20);
this->q9a->TabIndex = 8;
this->q9a->TabStop = true;
this->q9a->Text = L"A) 764";
this->q9a->UseVisualStyleBackColor = false;
//
// label18
//
this->label18->BackColor = System::Drawing::Color::DarkSlateGray;
this->label18->Dock = System::Windows::Forms::DockStyle::Top;
this->label18->ForeColor = System::Drawing::Color::Black;
this->label18->Location = System::Drawing::Point(41, 0);
this->label18->Name = L"label18";
this->label18->Size = System::Drawing::Size(553, 51);
this->label18->TabIndex = 7;
this->label18->Text = L"What would \fx be\?";
this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label19
//
this->label19->BackColor = System::Drawing::Color::DarkSlateGray;
this->label19->Dock = System::Windows::Forms::DockStyle::Left;
this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label19->ForeColor = System::Drawing::Color::White;
this->label19->Location = System::Drawing::Point(0, 0);
this->label19->Name = L"label19";
this->label19->Size = System::Drawing::Size(41, 123);
this->label19->TabIndex = 6;
this->label19->Text = L"Q9";
this->label19-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel10
//
this->panel10->BackColor = System::Drawing::Color::Transparent;
this->panel10->Controls->Add(this->q8d);
this->panel10->Controls->Add(this->q8b);
this->panel10->Controls->Add(this->q8c);

```

```

this->panel10->Controls->Add(this->q8a);
this->panel10->Controls->Add(this->label16);
this->panel10->Controls->Add(this->label17);
this->panel10->Dock = System::Windows::Forms::DockStyle::Top;
this->panel10->Location = System::Drawing::Point(0, 983);
this->panel10->Name = L"panel10";
this->panel10->Size = System::Drawing::Size(594, 100);
this->panel10->TabIndex = 16;
//
// q8d
//
this->q8d->AutoSize = true;
this->q8d->BackColor = System::Drawing::Color::Transparent;
this->q8d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q8d->Location = System::Drawing::Point(285, 65);
this->q8d->Name = L"q8d";
this->q8d->Size = System::Drawing::Size(56, 20);
this->q8d->TabIndex = 11;
this->q8d->TabStop = true;
this->q8d->Text = L"D) 52";
this->q8d->UseVisualStyleBackColor = false;
//
// q8b
//
this->q8b->AutoSize = true;
this->q8b->BackColor = System::Drawing::Color::Transparent;
this->q8b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q8b->Location = System::Drawing::Point(126, 66);
this->q8b->Name = L"q8b";
this->q8b->Size = System::Drawing::Size(56, 20);
this->q8b->TabIndex = 10;
this->q8b->TabStop = true;
this->q8b->Text = L"B) 35";
this->q8b->UseVisualStyleBackColor = false;
//
// q8c
//
this->q8c->AutoSize = true;
this->q8c->BackColor = System::Drawing::Color::Transparent;
this->q8c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q8c->Location = System::Drawing::Point(285, 45);
this->q8c->Name = L"q8c";
this->q8c->Size = System::Drawing::Size(56, 20);
this->q8c->TabIndex = 9;
this->q8c->TabStop = true;
this->q8c->Text = L"C) 45";

```

```

this->q8c->UseVisualStyleBackColor = false;
//
// q8a
//
this->q8a->AutoSize = true;
this->q8a->BackColor = System::Drawing::Color::Transparent;
this->q8a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q8a->Location = System::Drawing::Point(126, 46);
this->q8a->Name = L"q8a";
this->q8a->Size = System::Drawing::Size(56, 20);
this->q8a->TabIndex = 8;
this->q8a->TabStop = true;
this->q8a->Text = L"A) 51";
this->q8a->UseVisualStyleBackColor = false;
//
// label16
//
this->label16->BackColor = System::Drawing::Color::DarkSlateGray;
this->label16->Dock = System::Windows::Forms::DockStyle::Top;
this->label16->ForeColor = System::Drawing::Color::Black;
this->label16->Location = System::Drawing::Point(41, 0);
this->label16->Name = L"label16";
this->label16->Size = System::Drawing::Size(553, 37);
this->label16->TabIndex = 7;
this->label16->Text = L"\u03a3f would be, ";
this->label16-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label17
//
this->label17->BackColor = System::Drawing::Color::DarkSlateGray;
this->label17->Dock = System::Windows::Forms::DockStyle::Left;
this->label17->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label17->ForeColor = System::Drawing::Color::White;
this->label17->Location = System::Drawing::Point(0, 0);
this->label17->Name = L"label17";
this->label17->Size = System::Drawing::Size(41, 100);
this->label17->TabIndex = 6;
this->label17->Text = L"Q8";
this->label17-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel11
//
this->panel11->BackColor = System::Drawing::Color::Transparent;
this->panel11->Controls->Add(this->q7d);
this->panel11->Controls->Add(this->q7b);
this->panel11->Controls->Add(this->q7c);
this->panel11->Controls->Add(this->q7a);
this->panel11->Controls->Add(this->label14);
this->panel11->Controls->Add(this->label15);
this->panel11->Dock = System::Windows::Forms::DockStyle::Top;

```

```

this->panel11->Location = System::Drawing::Point(0, 883);
this->panel11->Name = L"panel11";
this->panel11->Size = System::Drawing::Size(594, 100);
this->panel11->TabIndex = 15;
//
// q7d
//
this->q7d->AutoSize = true;
this->q7d->BackColor = System::Drawing::Color::Transparent;
this->q7d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q7d->Location = System::Drawing::Point(285, 65);
this->q7d->Name = L"q7d";
this->q7d->Size = System::Drawing::Size(56, 20);
this->q7d->TabIndex = 11;
this->q7d->TabStop = true;
this->q7d->Text = L"D) 14";
this->q7d->UseVisualStyleBackColor = false;
//
// q7b
//
this->q7b->AutoSize = true;
this->q7b->BackColor = System::Drawing::Color::Transparent;
this->q7b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q7b->Location = System::Drawing::Point(126, 66);
this->q7b->Name = L"q7b";
this->q7b->Size = System::Drawing::Size(63, 20);
this->q7b->TabIndex = 10;
this->q7b->TabStop = true;
this->q7b->Text = L"B) 672";
this->q7b->UseVisualStyleBackColor = false;
//
// q7c
//
this->q7c->AutoSize = true;
this->q7c->BackColor = System::Drawing::Color::Transparent;
this->q7c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q7c->Location = System::Drawing::Point(285, 45);
this->q7c->Name = L"q7c";
this->q7c->Size = System::Drawing::Size(70, 20);
this->q7c->TabIndex = 9;
this->q7c->TabStop = true;
this->q7c->Text = L"C) 1056";
this->q7c->UseVisualStyleBackColor = false;
//
// q7a
//

```

```

this->q7a->AutoSize = true;
this->q7a->BackColor = System::Drawing::Color::Transparent;
this->q7a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q7a->Location = System::Drawing::Point(126, 46);
this->q7a->Name = L"q7a";
this->q7a->Size = System::Drawing::Size(63, 20);
this->q7a->TabIndex = 8;
this->q7a->TabStop = true;
this->q7a->Text = L"A) 512";
this->q7a->UseVisualStyleBackColor = false;
//
// label14
//
this->label14->BackColor = System::Drawing::Color::DarkSlateGray;
this->label14->Dock = System::Windows::Forms::DockStyle::Top;
this->label14->ForeColor = System::Drawing::Color::Black;
this->label14->Location = System::Drawing::Point(41, 0);
this->label14->Name = L"label14";
this->label14->Size = System::Drawing::Size(553, 37);
this->label14->TabIndex = 7;
this->label14->Text = L"The fx for the range 30-35 would be,";
this->label14-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label15
//
this->label15->BackColor = System::Drawing::Color::DarkSlateGray;
this->label15->Dock = System::Windows::Forms::DockStyle::Left;
this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label15->ForeColor = System::Drawing::Color::White;
this->label15->Location = System::Drawing::Point(0, 0);
this->label15->Name = L"label15";
this->label15->Size = System::Drawing::Size(41, 100);
this->label15->TabIndex = 6;
this->label15->Text = L"Q7";
this->label15-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel12
//
this->panel12->BackColor = System::Drawing::Color::Transparent;
this->panel12->Controls->Add(this->label23);
this->panel12->Controls->Add(this->label24);
this->panel12->Controls->Add(this->q6d);
this->panel12->Controls->Add(this->q6b);
this->panel12->Controls->Add(this->q6c);
this->panel12->Controls->Add(this->q6a);
this->panel12->Controls->Add(this->label12);
this->panel12->Controls->Add(this->label13);
this->panel12->Dock = System::Windows::Forms::DockStyle::Top;
this->panel12->Location = System::Drawing::Point(0, 696);
this->panel12->Name = L"panel12";

```

```

this->panel12->Size = System::Drawing::Size(594, 187);
this->panel12->TabIndex = 14;
//
// label13
//
this->label13->BackColor = System::Drawing::Color::DarkSlateGray;
this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label13->ForeColor = System::Drawing::Color::White;
this->label13->Location = System::Drawing::Point(0, 70);
this->label13->Name = L"label13";
this->label13->Size = System::Drawing::Size(41, 117);
this->label13->TabIndex = 6;
this->label13->Text = L"Q6";
this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel8
//
this->panel8->BackColor = System::Drawing::Color::Transparent;
this->panel8->Controls->Add(this->q5d);
this->panel8->Controls->Add(this->q5b);
this->panel8->Controls->Add(this->q5c);
this->panel8->Controls->Add(this->q5a);
this->panel8->Controls->Add(this->label10);
this->panel8->Controls->Add(this->label11);
this->panel8->Dock = System::Windows::Forms::DockStyle::Top;
this->panel8->Location = System::Drawing::Point(0, 596);
this->panel8->Name = L"panel8";
this->panel8->Size = System::Drawing::Size(594, 100);
this->panel8->TabIndex = 13;
//
// label9
//
this->label9->BackColor = System::Drawing::Color::Teal;
this->label9->Dock = System::Windows::Forms::DockStyle::Top;
this->label9->ForeColor = System::Drawing::Color::Black;
this->label9->Location = System::Drawing::Point(0, 27);
this->label9->Name = L"label9";
this->label9->Size = System::Drawing::Size(594, 39);
this->label9->TabIndex = 6;
this->label9->Text = L"A group of Students observed the Temperature
(in Celsius) of a particular City fo"
L"r 2 weeks and have recorded their findings as follows- ";
this->label9-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// label22
//
this->label22->BackColor = System::Drawing::Color::DarkSlateGray;
this->label22->ForeColor = System::Drawing::Color::Black;
this->label22->Location = System::Drawing::Point(40, 194);
this->label22->Name = L"label22";
this->label22->Size = System::Drawing::Size(553, 37);
this->label22->TabIndex = 7;
this->label22->Text = L"The most suitable value to be taken as the
assumed mean (A) here is, ";

```

```

        this->label22->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // pictureBox1
    //
    this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
    this->pictureBox1->Location = System::Drawing::Point(212, 62);
    this->pictureBox1->Name = L"pictureBox1";
    this->pictureBox1->Size = System::Drawing::Size(176, 128);
    this->pictureBox1->TabIndex = 8;
    this->pictureBox1->TabStop = false;
    //
    // label23
    //
    this->label23->BackColor = System::Drawing::Color::Teal;
    this->label23->Dock = System::Windows::Forms::DockStyle::Top;
    this->label23->ForeColor = System::Drawing::Color::Black;
    this->label23->Location = System::Drawing::Point(0, 27);
    this->label23->Name = L"label23";
    this->label23->Size = System::Drawing::Size(594, 39);
    this->label23->TabIndex = 13;
    this->label23->Text = resources->GetString(L"label23.Text");
    this->label23-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // label24
    //
    this->label24->BackColor = System::Drawing::Color::Teal;
    this->label24->Dock = System::Windows::Forms::DockStyle::Top;
    this->label24->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label24->ForeColor = System::Drawing::Color::Black;
    this->label24->Location = System::Drawing::Point(0, 0);
    this->label24->Name = L"label24";
    this->label24->Size = System::Drawing::Size(594, 27);
    this->label24->TabIndex = 12;
    this->label24->Text = L"Q6- Q10 are based on the following:";
    this->label24-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // freqD
    //
    this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
    this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
    this->ClientSize = System::Drawing::Size(623, 447);
    this->Controls->Add(this->panel1);
    this->ForeColor = System::Drawing::Color::Black;
    this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
    this->MaximizeBox = false;
    this->MinimizeBox = false;
    this->Name = L"freqD";
    this->ShowIcon = false;
    this->ShowInTaskbar = false;
    this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;

```

```

        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"freqD";
        this->SizeChanged += gcnew System::EventHandler(this,
&freqD::freqD_SizeChanged);
        this->panel6->ResumeLayout(false);
        this->panel6->PerformLayout();
        this->panel5->ResumeLayout(false);
        this->panel5->PerformLayout();
        this->panel2->ResumeLayout(false);
        this->panel2->PerformLayout();
        this->panel4->ResumeLayout(false);
        this->panel4->PerformLayout();
        this->panel11->ResumeLayout(false);
        this->panel7->ResumeLayout(false);
        this->panel7->PerformLayout();
        this->panel9->ResumeLayout(false);
        this->panel9->PerformLayout();
        this->panel10->ResumeLayout(false);
        this->panel10->PerformLayout();
        this->panel11->ResumeLayout(false);
        this->panel11->PerformLayout();
        this->panel12->ResumeLayout(false);
        this->panel12->PerformLayout();
        this->panel8->ResumeLayout(false);
        this->panel8->PerformLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox1))->EndInit();
        this->ResumeLayout(false);

    }
#pragma endregion
    private: System::Void freqD_SizeChanged(System::Object^ sender,
System::EventArgs^ e) {
            this->CenterToScreen();
        }
};

}

```

9. scaD.cpp (Scale Diagrams)

Scale Diagrams

Scale Diagrams

Your Examination Progress

Current Exam Progress = 0 Last Exam Progress = 0

0:30:56

Exam in Progress

The line-of-sight when standing erect is,

Q1

- A) Elevated
- B) Parallel
- C) Horizontal
- D) Vertical

An example for a horizontal plane is,

Q2

- A) A circular globe
- B) The surface of an almirah
- C) A concrete slab
- D) The surface of a computer screen

Vertical is the line,

Q3

- A) Zigzag to the horizontal
- B) Perpendicular to the horizontal
- C) Bisecting the horizontal
- D) Equal to the horizontal

A fixed mirror on a wall is,

```
#include "scaD.h"
```

10. scaD.h (Scale Diagrams)

```
#pragma once
#include "CoreControls.h"

namespace mExams {

    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 scaD
    /// </summary>
    public ref class scaD : public System::Windows::Forms::Form
    {
public:
    Core ^ core;
    scaD(void)
    {
        InitializeComponent();
        core= gcnew Core("Scale Diagrams", this,"scadr");
        setAnswer();
    }
    void setAnswer(){
        core->aSet[0]=q1c;
        core->aSet[1]=q2c;
        core->aSet[2]=q3b;
        core->aSet[3]=q4a;
        core->aSet[4]=q5d;
        core->aSet[5]=q6a;
        core->aSet[6]=q7c;
        core->aSet[7]=q8a;
        core->aSet[8]=q9b;
        core->aSet[9]=q10d;
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    ~scaD()
    {
        if (components)
        {
            delete components;
        }
    }
private: System::Windows::Forms::Panel^ panel1;
protected:
internal: System::Windows::Forms::Panel^ panel7;
private:
private: System::Windows::Forms::RadioButton^ q10d;
internal:
```

```
private: System::Windows::Forms::RadioButton^ q10b;
private: System::Windows::Forms::RadioButton^ q10c;
private: System::Windows::Forms::RadioButton^ q10a;
private: System::Windows::Forms::Label^ label20;
private: System::Windows::Forms::Label^ label21;
internal: System::Windows::Forms::Panel^ panel9;
private:
private: System::Windows::Forms::RadioButton^ q9d;
internal:
private: System::Windows::Forms::RadioButton^ q9b;
private: System::Windows::Forms::RadioButton^ q9c;
private: System::Windows::Forms::RadioButton^ q9a;
private: System::Windows::Forms::Label^ label18;
private: System::Windows::Forms::Label^ label19;
internal: System::Windows::Forms::Panel^ panel10;
private:
private: System::Windows::Forms::RadioButton^ q8d;
internal:
private: System::Windows::Forms::RadioButton^ q8b;
private: System::Windows::Forms::RadioButton^ q8c;
private: System::Windows::Forms::RadioButton^ q8a;
private: System::Windows::Forms::Label^ label16;
private: System::Windows::Forms::Label^ label17;
internal: System::Windows::Forms::Panel^ panel11;
private:
private: System::Windows::Forms::RadioButton^ q7d;
internal:
private: System::Windows::Forms::RadioButton^ q7b;
private: System::Windows::Forms::RadioButton^ q7c;
private: System::Windows::Forms::RadioButton^ q7a;
private: System::Windows::Forms::Label^ label14;
private: System::Windows::Forms::Label^ label15;
internal: System::Windows::Forms::Panel^ panel12;
private:
private: System::Windows::Forms::RadioButton^ q6d;
internal:
private: System::Windows::Forms::RadioButton^ q6b;
private: System::Windows::Forms::RadioButton^ q6c;
private: System::Windows::Forms::RadioButton^ q6a;
private: System::Windows::Forms::Label^ label12;
private: System::Windows::Forms::Label^ label13;
internal: System::Windows::Forms::Panel^ panel8;
private:
private: System::Windows::Forms::RadioButton^ q5d;
internal:
private: System::Windows::Forms::RadioButton^ q5b;
private: System::Windows::Forms::RadioButton^ q5c;
private: System::Windows::Forms::RadioButton^ q5a;
private: System::Windows::Forms::Label^ label10;
private: System::Windows::Forms::Label^ label11;
internal: System::Windows::Forms::Panel^ panel6;
private:
private: System::Windows::Forms::RadioButton^ q4d;
internal:
private: System::Windows::Forms::RadioButton^ q4b;
private: System::Windows::Forms::RadioButton^ q4c;
private: System::Windows::Forms::RadioButton^ q4a;
private: System::Windows::Forms::Label^ label7;
```

```

private: System::Windows::Forms::Label^  label8;
internal: System::Windows::Forms::Panel^  panel5;
private:
private: System::Windows::Forms::RadioButton^  q3d;
internal:
private: System::Windows::Forms::RadioButton^  q3b;
private: System::Windows::Forms::RadioButton^  q3c;
private: System::Windows::Forms::RadioButton^  q3a;
private: System::Windows::Forms::Label^  label5;
private: System::Windows::Forms::Label^  label6;
internal: System::Windows::Forms::Panel^  panel4;
private:
private: System::Windows::Forms::RadioButton^  q2d;
internal:
private: System::Windows::Forms::RadioButton^  q2b;
private: System::Windows::Forms::RadioButton^  q2c;
private: System::Windows::Forms::RadioButton^  q2a;
private: System::Windows::Forms::Label^  label3;
private: System::Windows::Forms::Label^  label4;
internal: System::Windows::Forms::Panel^  panel2;
private:
private: System::Windows::Forms::RadioButton^  q1d;
internal:
private: System::Windows::Forms::RadioButton^  q1b;
private: System::Windows::Forms::RadioButton^  q1c;
private: System::Windows::Forms::RadioButton^  q1a;
private: System::Windows::Forms::Label^  label2;
private: System::Windows::Forms::Label^  label1;

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
void InitializeComponent(void)
{
    System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(scaD::typeid));
    this->panel1 = (gcnew System::Windows::Forms::Panel());
    this->panel7 = (gcnew System::Windows::Forms::Panel());
    this->q10d = (gcnew System::Windows::Forms::RadioButton());
    this->q10b = (gcnew System::Windows::Forms::RadioButton());
    this->q10c = (gcnew System::Windows::Forms::RadioButton());
    this->q10a = (gcnew System::Windows::Forms::RadioButton());
    this->label20 = (gcnew System::Windows::Forms::Label());
    this->label21 = (gcnew System::Windows::Forms::Label());
    this->panel9 = (gcnew System::Windows::Forms::Panel());
    this->q9d = (gcnew System::Windows::Forms::RadioButton());
    this->q9b = (gcnew System::Windows::Forms::RadioButton());
    this->q9c = (gcnew System::Windows::Forms::RadioButton());
    this->q9a = (gcnew System::Windows::Forms::RadioButton());
    this->label18 = (gcnew System::Windows::Forms::Label());
}

```



```

this->panel7->SuspendLayout();
this->panel9->SuspendLayout();
this->panel10->SuspendLayout();
this->panel11->SuspendLayout();
this->panel12->SuspendLayout();
this->panel8->SuspendLayout();
this->panel6->SuspendLayout();
this->panel5->SuspendLayout();
this->panel4->SuspendLayout();
this->panel2->SuspendLayout();
this->SuspendLayout();
//
// panel1
//
this->panel1->AutoScroll = true;
this->panel1->BackColor = System::Drawing::Color::White;
this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
this->panel1->Controls->Add(this->panel7);
this->panel1->Controls->Add(this->panel9);
this->panel1->Controls->Add(this->panel10);
this->panel1->Controls->Add(this->panel11);
this->panel1->Controls->Add(this->panel12);
this->panel1->Controls->Add(this->panel8);
this->panel1->Controls->Add(this->panel6);
this->panel1->Controls->Add(this->panel5);
this->panel1->Controls->Add(this->panel4);
this->panel1->Controls->Add(this->panel2);
this->panel1->Location = System::Drawing::Point(3, 88);
this->panel1->Name = L"panel1";
this->panel1->Size = System::Drawing::Size(611, 338);
this->panel1->TabIndex = 11;
//
// panel7
//
this->panel7->BackColor = System::Drawing::Color::Transparent;
this->panel7->Controls->Add(this->q10d);
this->panel7->Controls->Add(this->q10b);
this->panel7->Controls->Add(this->q10c);
this->panel7->Controls->Add(this->q10a);
this->panel7->Controls->Add(this->label120);
this->panel7->Controls->Add(this->label121);
this->panel7->Dock = System::Windows::Forms::DockStyle::Top;
this->panel7->Location = System::Drawing::Point(0, 923);
this->panel7->Name = L"panel7";
this->panel7->Size = System::Drawing::Size(594, 100);
this->panel7->TabIndex = 18;
//
// q10d
//
this->q10d->AutoSize = true;
this->q10d->BackColor = System::Drawing::Color::Transparent;
this->q10d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

this->q10d->Location = System::Drawing::Point(285, 65);
this->q10d->Name = L"q10d";
this->q10d->Size = System::Drawing::Size(112, 20);
this->q10d->TabIndex = 11;
this->q10d->TabStop = true;
this->q10d->Text = L"D) Clinometre";
this->q10d->UseVisualStyleBackColor = false;
//
// q10b
//
this->q10b->AutoSize = true;
this->q10b->BackColor = System::Drawing::Color::Transparent;
this->q10b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10b->Location = System::Drawing::Point(126, 66);
this->q10b->Name = L"q10b";
this->q10b->Size = System::Drawing::Size(99, 20);
this->q10b->TabIndex = 10;
this->q10b->TabStop = true;
this->q10b->Text = L"B) Compass";
this->q10b->UseVisualStyleBackColor = false;
//
// q10c
//
this->q10c->AutoSize = true;
this->q10c->BackColor = System::Drawing::Color::Transparent;
this->q10c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10c->Location = System::Drawing::Point(285, 45);
this->q10c->Name = L"q10c";
this->q10c->Size = System::Drawing::Size(105, 20);
this->q10c->TabIndex = 9;
this->q10c->TabStop = true;
this->q10c->Text = L"C) Protractor";
this->q10c->UseVisualStyleBackColor = false;
//
// q10a
//
this->q10a->AutoSize = true;
this->q10a->BackColor = System::Drawing::Color::Transparent;
this->q10a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q10a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q10a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q10a->Location = System::Drawing::Point(126, 46);
this->q10a->Name = L"q10a";
this->q10a->Size = System::Drawing::Size(111, 20);
this->q10a->TabIndex = 8;
this->q10a->TabStop = true;
this->q10a->Text = L"A) Plumb line";
this->q10a->UseVisualStyleBackColor = false;

```

```

//  

// label20  

//  

this->label20->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label20->Dock = System::Windows::Forms::DockStyle::Top;  

this->label20->ForeColor = System::Drawing::Color::Black;  

this->label20->Location = System::Drawing::Point(41, 0);  

this->label20->Name = L"label20";  

this->label20->Size = System::Drawing::Size(553, 37);  

this->label20->TabIndex = 7;  

this->label20->Text = L"The standard instrument used to measure  

angles of elevation and depression is, ";  

this->label20-> TextAlign =  

System::Drawing::ContentAlignment::MiddleLeft;  

//  

// label21  

//  

this->label21->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label21->Dock = System::Windows::Forms::DockStyle::Left;  

this->label21->Font = (gcnew System::Drawing::Font(L"Arial", 12,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->label21->ForeColor = System::Drawing::Color::White;  

this->label21->Location = System::Drawing::Point(0, 0);  

this->label21->Name = L"label21";  

this->label21->Size = System::Drawing::Size(41, 100);  

this->label21->TabIndex = 6;  

this->label21->Text = L"Q10";  

this->label21-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

//  

// panel9  

//  

this->panel9->BackColor = System::Drawing::Color::Transparent;  

this->panel9->Controls->Add(this->q9d);  

this->panel9->Controls->Add(this->q9b);  

this->panel9->Controls->Add(this->q9c);  

this->panel9->Controls->Add(this->q9a);  

this->panel9->Controls->Add(this->label18);  

this->panel9->Controls->Add(this->label19);  

this->panel9->Dock = System::Windows::Forms::DockStyle::Top;  

this->panel9->Location = System::Drawing::Point(0, 800);  

this->panel9->Name = L"panel9";  

this->panel9->Size = System::Drawing::Size(594, 123);  

this->panel9->TabIndex = 17;  

//  

// q9d  

//  

this->q9d->AutoSize = true;  

this->q9d->BackColor = System::Drawing::Color::Transparent;  

this->q9d->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q9d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q9d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->q9d->Location = System::Drawing::Point(285, 85);  

this->q9d->Name = L"q9d";  

this->q9d->Size = System::Drawing::Size(111, 20);

```

```

this->q9d->TabIndex = 11;
this->q9d->TabStop = true;
this->q9d->Text = L"D) 1,574.95km";
this->q9d->UseVisualStyleBackColor = false;
//
// q9b
//
this->q9b->AutoSize = true;
this->q9b->BackColor = System::Drawing::Color::Transparent;
this->q9b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q9b->Location = System::Drawing::Point(126, 86);
this->q9b->Name = L"q9b";
this->q9b->Size = System::Drawing::Size(111, 20);
this->q9b->TabIndex = 10;
this->q9b->TabStop = true;
this->q9b->Text = L"B) 1,607.14km";
this->q9b->UseVisualStyleBackColor = false;
//
// q9c
//
this->q9c->AutoSize = true;
this->q9c->BackColor = System::Drawing::Color::Transparent;
this->q9c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q9c->Location = System::Drawing::Point(285, 65);
this->q9c->Name = L"q9c";
this->q9c->Size = System::Drawing::Size(93, 20);
this->q9c->TabIndex = 9;
this->q9c->TabStop = true;
this->q9c->Text = L"C) 4,800km";
this->q9c->UseVisualStyleBackColor = false;
//
// q9a
//
this->q9a->AutoSize = true;
this->q9a->BackColor = System::Drawing::Color::Transparent;
this->q9a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q9a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q9a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q9a->Location = System::Drawing::Point(126, 66);
this->q9a->Name = L"q9a";
this->q9a->Size = System::Drawing::Size(93, 20);
this->q9a->TabIndex = 8;
this->q9a->TabStop = true;
this->q9a->Text = L"A) 2,800km";
this->q9a->UseVisualStyleBackColor = false;
//
// label18
//

```

```

this->label18->BackColor = System::Drawing::Color::DarkSlateGray;
this->label18->Dock = System::Windows::Forms::DockStyle::Top;
this->label18->ForeColor = System::Drawing::Color::Black;
this->label18->Location = System::Drawing::Point(41, 0);
this->label18->Name = L"label18";
this->label18->Size = System::Drawing::Size(553, 51);
this->label18->TabIndex = 7;
this->label18->Text = L"In a scale diagram of 2.8cm: 1000km, towns A
and B are drawn such that they are 4"
L".5cm apart. What is the distance from towns A to B\?";
this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label19
//
this->label19->BackColor = System::Drawing::Color::DarkSlateGray;
this->label19->Dock = System::Windows::Forms::DockStyle::Left;
this->label19->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label19->ForeColor = System::Drawing::Color::White;
this->label19->Location = System::Drawing::Point(0, 0);
this->label19->Name = L"label19";
this->label19->Size = System::Drawing::Size(41, 123);
this->label19->TabIndex = 6;
this->label19->Text = L"Q9";
this->label19-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel10
//
this->panel10->BackColor = System::Drawing::Color::Transparent;
this->panel10->Controls->Add(this->q8d);
this->panel10->Controls->Add(this->q8b);
this->panel10->Controls->Add(this->q8c);
this->panel10->Controls->Add(this->q8a);
this->panel10->Controls->Add(this->label16);
this->panel10->Controls->Add(this->label17);
this->panel10->Dock = System::Windows::Forms::DockStyle::Top;
this->panel10->Location = System::Drawing::Point(0, 700);
this->panel10->Name = L"panel10";
this->panel10->Size = System::Drawing::Size(594, 100);
this->panel10->TabIndex = 16;
//
// q8d
//
this->q8d->AutoSize = true;
this->q8d->BackColor = System::Drawing::Color::Transparent;
this->q8d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q8d->Location = System::Drawing::Point(285, 65);
this->q8d->Name = L"q8d";
this->q8d->Size = System::Drawing::Size(269, 20);
this->q8d->TabIndex = 11;
this->q8d->TabStop = true;

```

```

this->q8d->Text = L"D) Awkward sprain on his neck muscle";
this->q8d->UseVisualStyleBackColor = false;
//
// q8b
//
this->q8b->AutoSize = true;
this->q8b->BackColor = System::Drawing::Color::Transparent;
this->q8b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q8b->Location = System::Drawing::Point(99, 65);
this->q8b->Name = L"q8b";
this->q8b->Size = System::Drawing::Size(169, 20);
this->q8b->TabIndex = 10;
this->q8b->TabStop = true;
this->q8b->Text = L"B) Angle of Depression";
this->q8b->UseVisualStyleBackColor = false;
//
// q8c
//
this->q8c->AutoSize = true;
this->q8c->BackColor = System::Drawing::Color::Transparent;
this->q8c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q8c->Location = System::Drawing::Point(285, 45);
this->q8c->Name = L"q8c";
this->q8c->Size = System::Drawing::Size(278, 20);
this->q8c->TabIndex = 9;
this->q8c->TabStop = true;
this->q8c->Text = L"C) Perpendicular chord to the third-floor";
this->q8c->UseVisualStyleBackColor = false;
//
// q8a
//
this->q8a->AutoSize = true;
this->q8a->BackColor = System::Drawing::Color::Transparent;
this->q8a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q8a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q8a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q8a->Location = System::Drawing::Point(99, 45);
this->q8a->Name = L"q8a";
this->q8a->Size = System::Drawing::Size(158, 20);
this->q8a->TabIndex = 8;
this->q8a->TabStop = true;
this->q8a->Text = L"A) Angle of Elevation";
this->q8a->UseVisualStyleBackColor = false;
//
// label16
//
this->label16->BackColor = System::Drawing::Color::DarkSlateGray;
this->label16->Dock = System::Windows::Forms::DockStyle::Top;

```

```

        this->label16->ForeColor = System::Drawing::Color::Black;
        this->label16->Location = System::Drawing::Point(41, 0);
        this->label16->Name = L"label16";
        this->label16->Size = System::Drawing::Size(553, 37);
        this->label16->TabIndex = 7;
        this->label16->Text = resources->GetString(L"label16.Text");
        this->label16-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
// label17
//
this->label17->BackColor = System::Drawing::Color::DarkSlateGray;
this->label17->Dock = System::Windows::Forms::DockStyle::Left;
this->label17->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label17->ForeColor = System::Drawing::Color::White;
this->label17->Location = System::Drawing::Point(0, 0);
this->label17->Name = L"label17";
this->label17->Size = System::Drawing::Size(41, 100);
this->label17->TabIndex = 6;
this->label17->Text = L"Q8";
this->label17-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel11
//
this->panel11->BackColor = System::Drawing::Color::Transparent;
this->panel11->Controls->Add(this->q7d);
this->panel11->Controls->Add(this->q7b);
this->panel11->Controls->Add(this->q7c);
this->panel11->Controls->Add(this->q7a);
this->panel11->Controls->Add(this->label14);
this->panel11->Controls->Add(this->label15);
this->panel11->Dock = System::Windows::Forms::DockStyle::Top;
this->panel11->Location = System::Drawing::Point(0, 600);
this->panel11->Name = L"panel11";
this->panel11->Size = System::Drawing::Size(594, 100);
this->panel11->TabIndex = 15;
//
// q7d
//
this->q7d->AutoSize = true;
this->q7d->BackColor = System::Drawing::Color::Transparent;
this->q7d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q7d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q7d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q7d->Location = System::Drawing::Point(285, 65);
this->q7d->Name = L"q7d";
this->q7d->Size = System::Drawing::Size(157, 20);
this->q7d->TabIndex = 11;
this->q7d->TabStop = true;
this->q7d->Text = L"D) Remain stationary";
this->q7d->UseVisualStyleBackColor = false;
//
// q7b

```

```

//  

this->q7b->AutoSize = true;  

this->q7b->BackColor = System::Drawing::Color::Transparent;  

this->q7b->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q7b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q7b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q7b->Location = System::Drawing::Point(104, 65);  

this->q7b->Name = L"q7b";  

this->q7b->Size = System::Drawing::Size(122, 20);  

this->q7b->TabIndex = 10;  

this->q7b->TabStop = true;  

this->q7b->Text = L"B) Go sideways";  

this->q7b->UseVisualStyleBackColor = false;  

//  

// q7c  

//  

this->q7c->AutoSize = true;  

this->q7c->BackColor = System::Drawing::Color::Transparent;  

this->q7c->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q7c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q7c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q7c->Location = System::Drawing::Point(285, 45);  

this->q7c->Name = L"q7c";  

this->q7c->Size = System::Drawing::Size(142, 20);  

this->q7c->TabIndex = 9;  

this->q7c->TabStop = true;  

this->q7c->Text = L"C) Rotate Upwards";  

this->q7c->UseVisualStyleBackColor = false;  

//  

// q7a  

//  

this->q7a->AutoSize = true;  

this->q7a->BackColor = System::Drawing::Color::Transparent;  

this->q7a->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q7a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q7a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q7a->Location = System::Drawing::Point(104, 45);  

this->q7a->Name = L"q7a";  

this->q7a->Size = System::Drawing::Size(161, 20);  

this->q7a->TabIndex = 8;  

this->q7a->TabStop = true;  

this->q7a->Text = L"A) Rotate Downwards";  

this->q7a->UseVisualStyleBackColor = false;  

//  

// label14  

//  

this->label14->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label14->Dock = System::Windows::Forms::DockStyle::Top;  

this->label14->ForeColor = System::Drawing::Color::Black;  

this->label14->Location = System::Drawing::Point(41, 0);  

this->label14->Name = L"label14";  

this->label14->Size = System::Drawing::Size(553, 37);

```

```

        this->label14->TabIndex = 7;
        this->label14->Text = L"To form an angle of elevation, your line-of-
sight has to, ";
        this->label14-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label15
        //
        this->label15->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label15->Dock = System::Windows::Forms::DockStyle::Left;
        this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->label15->ForeColor = System::Drawing::Color::White;
        this->label15->Location = System::Drawing::Point(0, 0);
        this->label15->Name = L"label15";
        this->label15->Size = System::Drawing::Size(41, 100);
        this->label15->TabIndex = 6;
        this->label15->Text = L"Q7";
        this->label15-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // panel12
        //
        this->panel12->BackColor = System::Drawing::Color::Transparent;
        this->panel12->Controls->Add(this->q6d);
        this->panel12->Controls->Add(this->q6b);
        this->panel12->Controls->Add(this->q6c);
        this->panel12->Controls->Add(this->q6a);
        this->panel12->Controls->Add(this->label12);
        this->panel12->Controls->Add(this->label13);
        this->panel12->Dock = System::Windows::Forms::DockStyle::Top;
        this->panel12->Location = System::Drawing::Point(0, 500);
        this->panel12->Name = L"panel12";
        this->panel12->Size = System::Drawing::Size(594, 100);
        this->panel12->TabIndex = 14;
        //
        // q6d
        //
        this->q6d->AutoSize = true;
        this->q6d->BackColor = System::Drawing::Color::Transparent;
        this->q6d->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q6d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q6d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->q6d->Location = System::Drawing::Point(285, 65);
        this->q6d->Name = L"q6d";
        this->q6d->Size = System::Drawing::Size(238, 20);
        this->q6d->TabIndex = 11;
        this->q6d->TabStop = true;
        this->q6d->Text = L"D) Angle of Mutual Understanding";
        this->q6d->UseVisualStyleBackColor = false;
        //
        // q6b
        //
        this->q6b->AutoSize = true;
        this->q6b->BackColor = System::Drawing::Color::Transparent;

```

```

this->q6b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q6b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q6b->Location = System::Drawing::Point(104, 65);
this->q6b->Name = L"q6b";
this->q6b->Size = System::Drawing::Size(175, 20);
this->q6b->TabIndex = 10;
this->q6b->TabStop = true;
this->q6b->Text = L"B) Angle of Repentance";
this->q6b->UseVisualStyleBackColor = false;
//
// q6c
//
this->q6c->AutoSize = true;
this->q6c->BackColor = System::Drawing::Color::Transparent;
this->q6c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q6c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q6c->Location = System::Drawing::Point(285, 45);
this->q6c->Name = L"q6c";
this->q6c->Size = System::Drawing::Size(158, 20);
this->q6c->TabIndex = 9;
this->q6c->TabStop = true;
this->q6c->Text = L"C) Angle of Elevation";
this->q6c->UseVisualStyleBackColor = false;
//
// q6a
//
this->q6a->AutoSize = true;
this->q6a->BackColor = System::Drawing::Color::Transparent;
this->q6a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q6a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q6a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q6a->Location = System::Drawing::Point(104, 45);
this->q6a->Name = L"q6a";
this->q6a->Size = System::Drawing::Size(169, 20);
this->q6a->TabIndex = 8;
this->q6a->TabStop = true;
this->q6a->Text = L"A) Angle of Depression";
this->q6a->UseVisualStyleBackColor = false;
//
// label12
//
this->label12->BackColor = System::Drawing::Color::DarkSlateGray;
this->label12->Dock = System::Windows::Forms::DockStyle::Top;
this->label12->ForeColor = System::Drawing::Color::Black;
this->label12->Location = System::Drawing::Point(41, 0);
this->label12->Name = L"label12";
this->label12->Size = System::Drawing::Size(553, 37);
this->label12->TabIndex = 7;
this->label12->Text = L"A driver turns a speeding car sharply to a
street on the left and seeing a cat do"

```

```

L"wn on the road ahead of him, quickly applies the breaks.
While looking at the ca"
    L"t, he formed an, ";
    this->label12->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // label13
    //
    this->label13->BackColor = System::Drawing::Color::DarkSlateGray;
    this->label13->Dock = System::Windows::Forms::DockStyle::Left;
    this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label13->ForeColor = System::Drawing::Color::White;
    this->label13->Location = System::Drawing::Point(0, 0);
    this->label13->Name = L"label13";
    this->label13->Size = System::Drawing::Size(41, 100);
    this->label13->TabIndex = 6;
    this->label13->Text = L"Q6";
    this->label13-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
    //
    // panel8
    //
    this->panel8->BackColor = System::Drawing::Color::Transparent;
    this->panel8->Controls->Add(this->q5d);
    this->panel8->Controls->Add(this->q5b);
    this->panel8->Controls->Add(this->q5c);
    this->panel8->Controls->Add(this->q5a);
    this->panel8->Controls->Add(this->label10);
    this->panel8->Controls->Add(this->label11);
    this->panel8->Dock = System::Windows::Forms::DockStyle::Top;
    this->panel8->Location = System::Drawing::Point(0, 400);
    this->panel8->Name = L"panel8";
    this->panel8->Size = System::Drawing::Size(594, 100);
    this->panel8->TabIndex = 13;
    //
    // q5d
    //
    this->q5d->AutoSize = true;
    this->q5d->BackColor = System::Drawing::Color::Transparent;
    this->q5d->Cursor = System::Windows::Forms::Cursors::Hand;
    this->q5d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->q5d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->q5d->Location = System::Drawing::Point(285, 65);
    this->q5d->Name = L"q5d";
    this->q5d->Size = System::Drawing::Size(90, 20);
    this->q5d->TabIndex = 11;
    this->q5d->TabStop = true;
    this->q5d->Text = L"D) Vertical";
    this->q5d->UseVisualStyleBackColor = false;
    //
    // q5b
    //
    this->q5b->AutoSize = true;
    this->q5b->BackColor = System::Drawing::Color::Transparent;

```

```

        this->q5b->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q5b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q5b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q5b->Location = System::Drawing::Point(126, 66);
        this->q5b->Name = L"q5b";
        this->q5b->Size = System::Drawing::Size(107, 20);
        this->q5b->TabIndex = 10;
        this->q5b->TabStop = true;
        this->q5b->Text = L"B) Horizontal";
        this->q5b->UseVisualStyleBackColor = false;
        //
        // q5c
        //
        this->q5c->AutoSize = true;
        this->q5c->BackColor = System::Drawing::Color::Transparent;
        this->q5c->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q5c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q5c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q5c->Location = System::Drawing::Point(285, 45);
        this->q5c->Name = L"q5c";
        this->q5c->Size = System::Drawing::Size(112, 20);
        this->q5c->TabIndex = 9;
        this->q5c->TabStop = true;
        this->q5c->Text = L"C) Alternating";
        this->q5c->UseVisualStyleBackColor = false;
        //
        // q5a
        //
        this->q5a->AutoSize = true;
        this->q5a->BackColor = System::Drawing::Color::Transparent;
        this->q5a->Cursor = System::Windows::Forms::Cursors::Hand;
        this->q5a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
        this->q5a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->q5a->Location = System::Drawing::Point(126, 46);
        this->q5a->Name = L"q5a";
        this->q5a->Size = System::Drawing::Size(92, 20);
        this->q5a->TabIndex = 8;
        this->q5a->TabStop = true;
        this->q5a->Text = L"A) Circular";
        this->q5a->UseVisualStyleBackColor = false;
        //
        // label10
        //
        this->label10->BackColor = System::Drawing::Color::DarkSlateGray;
        this->label10->Dock = System::Windows::Forms::DockStyle::Top;
        this->label10->ForeColor = System::Drawing::Color::Black;
        this->label10->Location = System::Drawing::Point(41, 0);
        this->label10->Name = L"label10";
        this->label10->Size = System::Drawing::Size(553, 37);
        this->label10->TabIndex = 7;
        this->label10->Text = L"An eagle spots a stationary rat directly on
the ground below its flying-path. It "

```

```

        L"heads straight for the ground to catch it; its flying path
from that point is, ";
        this->label10->TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
// label11
//
this->label11->BackColor = System::Drawing::Color::DarkSlateGray;
this->label11->Dock = System::Windows::Forms::DockStyle::Left;
this->label11->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label11->ForeColor = System::Drawing::Color::White;
this->label11->Location = System::Drawing::Point(0, 0);
this->label11->Name = L"label11";
this->label11->Size = System::Drawing::Size(41, 100);
this->label11->TabIndex = 6;
this->label11->Text = L"Q5";
this->label11-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel6
//
this->panel6->BackColor = System::Drawing::Color::Transparent;
this->panel6->Controls->Add(this->q4d);
this->panel6->Controls->Add(this->q4b);
this->panel6->Controls->Add(this->q4c);
this->panel6->Controls->Add(this->q4a);
this->panel6->Controls->Add(this->label17);
this->panel6->Controls->Add(this->label18);
this->panel6->Dock = System::Windows::Forms::DockStyle::Top;
this->panel6->Location = System::Drawing::Point(0, 300);
this->panel6->Name = L"panel6";
this->panel6->Size = System::Drawing::Size(594, 100);
this->panel6->TabIndex = 11;
//
// q4d
//
this->q4d->AutoSize = true;
this->q4d->BackColor = System::Drawing::Color::Transparent;
this->q4d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q4d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q4d->Location = System::Drawing::Point(285, 65);
this->q4d->Name = L"q4d";
this->q4d->Size = System::Drawing::Size(94, 20);
this->q4d->TabIndex = 11;
this->q4d->TabStop = true;
this->q4d->Text = L"D) Western";
this->q4d->UseVisualStyleBackColor = false;
//
// q4b
//
this->q4b->AutoSize = true;
this->q4b->BackColor = System::Drawing::Color::Transparent;
this->q4b->Cursor = System::Windows::Forms::Cursors::Hand;

```

```

this->q4b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4b->Location = System::Drawing::Point(126, 66);
this->q4b->Name = L"q4b";
this->q4b->Size = System::Drawing::Size(89, 20);
this->q4b->TabIndex = 10;
this->q4b->TabStop = true;
this->q4b->Text = L"B) Eastern";
this->q4b->UseVisualStyleBackColor = false;
//
// q4c
//
this->q4c->AutoSize = true;
this->q4c->BackColor = System::Drawing::Color::Transparent;
this->q4c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q4c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4c->Location = System::Drawing::Point(285, 45);
this->q4c->Name = L"q4c";
this->q4c->Size = System::Drawing::Size(107, 20);
this->q4c->TabIndex = 9;
this->q4c->TabStop = true;
this->q4c->Text = L"C) Horizontal";
this->q4c->UseVisualStyleBackColor = false;
//
// q4a
//
this->q4a->AutoSize = true;
this->q4a->BackColor = System::Drawing::Color::Transparent;
this->q4a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q4a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q4a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q4a->Location = System::Drawing::Point(126, 46);
this->q4a->Name = L"q4a";
this->q4a->Size = System::Drawing::Size(90, 20);
this->q4a->TabIndex = 8;
this->q4a->TabStop = true;
this->q4a->Text = L"A) Vertical";
this->q4a->UseVisualStyleBackColor = false;
//
// label7
//
this->label7->BackColor = System::Drawing::Color::DarkSlateGray;
this->label7->Dock = System::Windows::Forms::DockStyle::Top;
this->label7->ForeColor = System::Drawing::Color::Black;
this->label7->Location = System::Drawing::Point(41, 0);
this->label7->Name = L"label7";
this->label7->Size = System::Drawing::Size(553, 37);
this->label7->TabIndex = 7;
this->label7->Text = L"A fixed mirror on a wall is,    ";
this->label7-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;

```

```

//  

// label8  

//  

this->label8->BackColor = System::Drawing::Color::DarkSlateGray;  

this->label8->Dock = System::Windows::Forms::DockStyle::Left;  

this->label8->Font = (gcnew System::Drawing::Font(L"Arial", 12,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->label8->ForeColor = System::Drawing::Color::White;  

this->label8->Location = System::Drawing::Point(0, 0);  

this->label8->Name = L"label8";  

this->label8->Size = System::Drawing::Size(41, 100);  

this->label8->TabIndex = 6;  

this->label8->Text = L"Q4";  

this->label8-> TextAlign =  

System::Drawing::ContentAlignment::MiddleCenter;  

//  

// panel5  

//  

this->panel5->BackColor = System::Drawing::Color::Transparent;  

this->panel5->Controls->Add(this->q3d);  

this->panel5->Controls->Add(this->q3b);  

this->panel5->Controls->Add(this->q3c);  

this->panel5->Controls->Add(this->q3a);  

this->panel5->Controls->Add(this->label5);  

this->panel5->Controls->Add(this->label6);  

this->panel5->Dock = System::Windows::Forms::DockStyle::Top;  

this->panel5->Location = System::Drawing::Point(0, 200);  

this->panel5->Name = L"panel5";  

this->panel5->Size = System::Drawing::Size(594, 100);  

this->panel5->TabIndex = 10;  

//  

// q3d  

//  

this->q3d->AutoSize = true;  

this->q3d->BackColor = System::Drawing::Color::Transparent;  

this->q3d->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q3d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q3d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));  

this->q3d->Location = System::Drawing::Point(331, 65);  

this->q3d->Name = L"q3d";  

this->q3d->Size = System::Drawing::Size(186, 20);  

this->q3d->TabIndex = 11;  

this->q3d->TabStop = true;  

this->q3d->Text = L"D) Equal to the horizontal";  

this->q3d->UseVisualStyleBackColor = false;  

//  

// q3b  

//  

this->q3b->AutoSize = true;  

this->q3b->BackColor = System::Drawing::Color::Transparent;  

this->q3b->Cursor = System::Windows::Forms::Cursors::Hand;  

this->q3b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;  

this->q3b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

    static_cast<System::Byte>(0)));

```

```

this->q3b->Location = System::Drawing::Point(76, 65);
this->q3b->Name = L"q3b";
this->q3b->Size = System::Drawing::Size(240, 20);
this->q3b->TabIndex = 10;
this->q3b->TabStop = true;
this->q3b->Text = L"B) Perpendicular to the horizontal";
this->q3b->UseVisualStyleBackColor = false;
//
// q3c
//
this->q3c->AutoSize = true;
this->q3c->BackColor = System::Drawing::Color::Transparent;
this->q3c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3c->Location = System::Drawing::Point(331, 45);
this->q3c->Name = L"q3c";
this->q3c->Size = System::Drawing::Size(192, 20);
this->q3c->TabIndex = 9;
this->q3c->TabStop = true;
this->q3c->Text = L"C) Bisecting the horizontal";
this->q3c->UseVisualStyleBackColor = false;
//
// q3a
//
this->q3a->AutoSize = true;
this->q3a->BackColor = System::Drawing::Color::Transparent;
this->q3a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q3a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q3a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q3a->Location = System::Drawing::Point(76, 45);
this->q3a->Name = L"q3a";
this->q3a->Size = System::Drawing::Size(192, 20);
this->q3a->TabIndex = 8;
this->q3a->TabStop = true;
this->q3a->Text = L"A) Zigzag to the horizontal";
this->q3a->UseVisualStyleBackColor = false;
//
// label5
//
this->label5->BackColor = System::Drawing::Color::DarkSlateGray;
this->label5->Dock = System::Windows::Forms::DockStyle::Top;
this->label5->ForeColor = System::Drawing::Color::Black;
this->label5->Location = System::Drawing::Point(41, 0);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(553, 37);
this->label5->TabIndex = 7;
this->label5->Text = L"Vertical is the line, ";
this->label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label6
//
this->label6->BackColor = System::Drawing::Color::DarkSlateGray;

```

```

        this->label6->Dock = System::Windows::Forms::DockStyle::Left;
        this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label6->ForeColor = System::Drawing::Color::White;
        this->label6->Location = System::Drawing::Point(0, 0);
        this->label6->Name = L"label6";
        this->label6->Size = System::Drawing::Size(41, 100);
        this->label6->TabIndex = 6;
        this->label6->Text = L"Q3";
        this->label6-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// panel4
//
this->panel4->BackColor = System::Drawing::Color::Transparent;
this->panel4->Controls->Add(this->q2d);
this->panel4->Controls->Add(this->q2b);
this->panel4->Controls->Add(this->q2c);
this->panel4->Controls->Add(this->q2a);
this->panel4->Controls->Add(this->label13);
this->panel4->Controls->Add(this->label14);
this->panel4->Dock = System::Windows::Forms::DockStyle::Top;
this->panel4->Location = System::Drawing::Point(0, 100);
this->panel4->Name = L"panel4";
this->panel4->Size = System::Drawing::Size(594, 100);
this->panel4->TabIndex = 9;
//
// q2d
//
this->q2d->AutoSize = true;
this->q2d->BackColor = System::Drawing::Color::Transparent;
this->q2d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
this->q2d->Location = System::Drawing::Point(300, 66);
this->q2d->Name = L"q2d";
this->q2d->Size = System::Drawing::Size(254, 20);
this->q2d->TabIndex = 11;
this->q2d->TabStop = true;
this->q2d->Text = L"D) The surface of a computer screen";
this->q2d->UseVisualStyleBackColor = false;
//
// q2b
//
this->q2b->AutoSize = true;
this->q2b->BackColor = System::Drawing::Color::Transparent;
this->q2b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
this->q2b->Location = System::Drawing::Point(76, 66);
this->q2b->Name = L"q2b";
this->q2b->Size = System::Drawing::Size(205, 20);
this->q2b->TabIndex = 10;

```

```

this->q2b->TabStop = true;
this->q2b->Text = L"B) The surface of an almirah";
this->q2b->UseVisualStyleBackColor = false;
//
// q2c
//
this->q2c->AutoSize = true;
this->q2c->BackColor = System::Drawing::Color::Transparent;
this->q2c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q2c->Location = System::Drawing::Point(300, 46);
this->q2c->Name = L"q2c";
this->q2c->Size = System::Drawing::Size(140, 20);
this->q2c->TabIndex = 9;
this->q2c->TabStop = true;
this->q2c->Text = L"C) A concrete slab";
this->q2c->UseVisualStyleBackColor = false;
//
// q2a
//
this->q2a->AutoSize = true;
this->q2a->BackColor = System::Drawing::Color::Transparent;
this->q2a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q2a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q2a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q2a->Location = System::Drawing::Point(76, 46);
this->q2a->Name = L"q2a";
this->q2a->Size = System::Drawing::Size(143, 20);
this->q2a->TabIndex = 8;
this->q2a->TabStop = true;
this->q2a->Text = L"A) A circular globe";
this->q2a->UseVisualStyleBackColor = false;
//
// label3
//
this->label3->BackColor = System::Drawing::Color::DarkSlateGray;
this->label3->Dock = System::Windows::Forms::DockStyle::Top;
this->label3->ForeColor = System::Drawing::Color::Black;
this->label3->Location = System::Drawing::Point(41, 0);
this->label3->Name = L"label3";
this->label3->Size = System::Drawing::Size(553, 37);
this->label3->TabIndex = 7;
this->label3->Text = L"An example for a horizontal plane is, ";
this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label4
//
this->label4->BackColor = System::Drawing::Color::DarkSlateGray;
this->label4->Dock = System::Windows::Forms::DockStyle::Left;
this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));

```

```

        this->label4->ForeColor = System::Drawing::Color::White;
        this->label4->Location = System::Drawing::Point(0, 0);
        this->label4->Name = L"label4";
        this->label4->Size = System::Drawing::Size(41, 100);
        this->label4->TabIndex = 6;
        this->label4->Text = L"Q2";
        this->label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// panel2
//
this->panel2->BackColor = System::Drawing::Color::Transparent;
this->panel2->Controls->Add(this->q1d);
this->panel2->Controls->Add(this->q1b);
this->panel2->Controls->Add(this->q1c);
this->panel2->Controls->Add(this->q1a);
this->panel2->Controls->Add(this->label12);
this->panel2->Controls->Add(this->label11);
this->panel2->Dock = System::Windows::Forms::DockStyle::Top;
this->panel2->Location = System::Drawing::Point(0, 0);
this->panel2->Name = L"panel2";
this->panel2->Size = System::Drawing::Size(594, 100);
this->panel2->TabIndex = 8;
//
// q1d
//
this->q1d->AutoSize = true;
this->q1d->BackColor = System::Drawing::Color::Transparent;
this->q1d->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1d->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1d->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q1d->Location = System::Drawing::Point(285, 65);
this->q1d->Name = L"q1d";
this->q1d->Size = System::Drawing::Size(90, 20);
this->q1d->TabIndex = 5;
this->q1d->TabStop = true;
this->q1d->Text = L"D) Vertical";
this->q1d->UseVisualStyleBackColor = false;
//
// q1b
//
this->q1b->AutoSize = true;
this->q1b->BackColor = System::Drawing::Color::Transparent;
this->q1b->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1b->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1b->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->q1b->Location = System::Drawing::Point(126, 66);
this->q1b->Name = L"q1b";
this->q1b->Size = System::Drawing::Size(92, 20);
this->q1b->TabIndex = 4;
this->q1b->TabStop = true;
this->q1b->Text = L"B) Parallel";
this->q1b->UseVisualStyleBackColor = false;
//

```

```

// q1c
//
this->q1c->AutoSize = true;
this->q1c->BackColor = System::Drawing::Color::Transparent;
this->q1c->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1c->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1c->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1c->Location = System::Drawing::Point(285, 45);
this->q1c->Name = L"q1c";
this->q1c->Size = System::Drawing::Size(107, 20);
this->q1c->TabIndex = 3;
this->q1c->TabStop = true;
this->q1c->Text = L"C) Horizontal";
this->q1c->UseVisualStyleBackColor = false;
//
// q1a
//
this->q1a->AutoSize = true;
this->q1a->BackColor = System::Drawing::Color::Transparent;
this->q1a->Cursor = System::Windows::Forms::Cursors::Hand;
this->q1a->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->q1a->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->q1a->Location = System::Drawing::Point(126, 46);
this->q1a->Name = L"q1a";
this->q1a->Size = System::Drawing::Size(97, 20);
this->q1a->TabIndex = 2;
this->q1a->TabStop = true;
this->q1a->Text = L"A) Elevated";
this->q1a->UseVisualStyleBackColor = false;
//
// label2
//
this->label2->BackColor = System::Drawing::Color::DarkSlateGray;
this->label2->Dock = System::Windows::Forms::DockStyle::Top;
this->label2->ForeColor = System::Drawing::Color::Black;
this->label2->Location = System::Drawing::Point(41, 0);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(553, 37);
this->label2->TabIndex = 1;
this->label2->Text = L"The line-of-sight when standing erect is, ";
this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
//
// label1
//
this->label1->BackColor = System::Drawing::Color::DarkSlateGray;
this->label1->Dock = System::Windows::Forms::DockStyle::Left;
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 12,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label1->ForeColor = System::Drawing::Color::White;
this->label1->Location = System::Drawing::Point(0, 0);
this->label1->Name = L"label1";
this->label1->Size = System::Drawing::Size(41, 100);

```

```

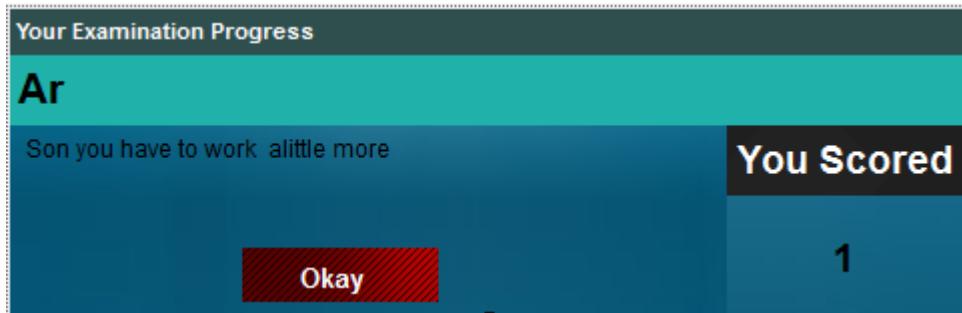
        this->label1->TabIndex = 0;
        this->label1->Text = L"Q1";
        this->label1->TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// scad
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->ClientSize = System::Drawing::Size(623, 447);
this->Controls->Add(this->panel1);
this->ForeColor = System::Drawing::Color::Black;
this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
this->MaximizeBox = false;
this->MinimizeBox = false;
this->Name = L"scaD";
this->ShowIcon = false;
this->ShowInTaskbar = false;
this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
this->Text = L"scaD";
this->SizeChanged += gcnew System::EventHandler(this,
&scaD::scaD_SizeChanged);
        this->panel1->ResumeLayout(false);
        this->panel7->ResumeLayout(false);
        this->panel7->PerformLayout();
        this->panel9->ResumeLayout(false);
        this->panel9->PerformLayout();
        this->panel10->ResumeLayout(false);
        this->panel10->PerformLayout();
        this->panel11->ResumeLayout(false);
        this->panel11->PerformLayout();
        this->panel12->ResumeLayout(false);
        this->panel12->PerformLayout();
        this->panel8->ResumeLayout(false);
        this->panel8->PerformLayout();
        this->panel6->ResumeLayout(false);
        this->panel6->PerformLayout();
        this->panel5->ResumeLayout(false);
        this->panel5->PerformLayout();
        this->panel4->ResumeLayout(false);
        this->panel4->PerformLayout();
        this->panel2->ResumeLayout(false);
        this->panel2->PerformLayout();
        this->ResumeLayout(false);

    }
#pragma endregion
    private: System::Void scaD_SizeChanged(System::Object^ sender, System::EventArgs^
e) {
            this->CenterToScreen();
        }
};

}

```

11. showR.cpp



```
#include "showR.h"
```

12. showR.h

```
#pragma once
namespace mExams {

    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;

    /// <summary>
    /// Summary for showR
    /// </summary>
    public ref class showR : public System::Windows::Forms::Form
    {
    public:
        int tot;
        void setData(){
            tot=System::Convert::ToInt16(score->Text);
            if(tot<40){
                desc->Text="Bad";
            }else if(tot>=40 && tot<60){
                desc->Text="Not Bad1";
            }else if(tot>60 && tot<75){
                desc->Text="Not Bad2";
            }else if(tot>75){
                desc->Text="Not Bad3";
            }
        }
        showR(void){
            InitializeComponent();
            setData();
        }

    protected:
        ~showR()
        {
            if (components)
```

```

        {
            delete components;
        }
    }

private: System::Windows::Forms::Button^ start;
protected:
internal: System::Windows::Forms::Label^ ename;
private:
internal: System::Windows::Forms::Label^ caln;
internal: System::Windows::Forms::Label^ ssss;
private: System::Windows::Forms::Panel^ panel1;
internal:

private:
internal: System::Windows::Forms::Label^ score;
private: System::Windows::Forms::Label^ desc;
internal:

private:
    System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
void InitializeComponent(void)
{
    System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(showR::typeid));
    this->start = (gcnew System::Windows::Forms::Button());
    this->ename = (gcnew System::Windows::Forms::Label());
    this->caln = (gcnew System::Windows::Forms::Label());
    this->ssss = (gcnew System::Windows::Forms::Label());
    this->panel1 = (gcnew System::Windows::Forms::Panel());
    this->score = (gcnew System::Windows::Forms::Label());
    this->desc = (gcnew System::Windows::Forms::Label());
    this->panel1->SuspendLayout();
    this->SuspendLayout();
    //
    // start
    //
    this->start->BackColor = System::Drawing::Color::Transparent;
    this->start->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::None;
    this->start->Cursor = System::Windows::Forms::Cursors::Hand;
    this->start->FlatAppearance->BorderSize = 0;
    this->start->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
    this->start->Font = (gcnew System::Drawing::Font(L"Arial", 9.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
    this->start->ForeColor = System::Drawing::Color::White;
    this->start->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"start.Image")));
    this->start->ImageAlign =
System::Drawing::ContentAlignment::TopLeft;
    this->start->Location = System::Drawing::Point(111, 114);
    this->start->Name = L"start";
}

```

```

        this->start->Size = System::Drawing::Size(103, 32);
        this->start->TabIndex = 364;
        this->start->Text = L"Okay";
        this->start-> TextAlign =
System::Drawing::ContentAlignment::BottomCenter;
        this->start->UseVisualStyleBackColor = false;
        this->start->Click += gcnew System::EventHandler(this,
&showR::start_Click);
        //
        // ename
        //
        this->ename->BackColor = System::Drawing::Color::LightSeaGreen;
        this->ename->Dock = System::Windows::Forms::DockStyle::Top;
        this->ename->Font = (gcnew System::Drawing::Font(L"Arial", 15.75F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->ename->ForeColor = System::Drawing::Color::Black;
        this->ename->Location = System::Drawing::Point(0, 23);
        this->ename->Name = L"ename";
        this->ename->Size = System::Drawing::Size(479, 35);
        this->ename->TabIndex = 362;
        this->ename->Text = L"Ar";
        this->ename-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // caln
        //
        this->caln->BackColor = System::Drawing::Color::DarkSlateGray;
        this->caln->Dock = System::Windows::Forms::DockStyle::Top;
        this->caln->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->caln->ForeColor = System::Drawing::Color::White;
        this->caln->Location = System::Drawing::Point(0, 0);
        this->caln->Name = L"caln";
        this->caln->Size = System::Drawing::Size(479, 23);
        this->caln->TabIndex = 363;
        this->caln->Text = L"Your Examination Progress";
        this->caln-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // ssss
        //
        this->ssss->BackColor = System::Drawing::Color::Gold;
        this->ssss->Dock = System::Windows::Forms::DockStyle::Top;
        this->ssss->Font = (gcnew System::Drawing::Font(L"Arial", 14.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
        static_cast<System::Byte>(0)));
        this->ssss->ForeColor = System::Drawing::Color::White;
        this->ssss->Image = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"ssss.Image")));
        this->ssss->Location = System::Drawing::Point(0, 0);
        this->ssss->Name = L"ssss";
        this->ssss->Size = System::Drawing::Size(120, 35);
        this->ssss->TabIndex = 358;
        this->ssss->Text = L"You Scored";
        this->ssss-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

```

```

//
// panel1
//
this->panel1->BackColor = System::Drawing::Color::Black;
this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
this->panel1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->panel1->Controls->Add(this->ssss);
this->panel1->Controls->Add(this->score);
this->panel1->ForeColor = System::Drawing::Color::Gold;
this->panel1->Location = System::Drawing::Point(358, 58);
this->panel1->Name = L"panel1";
this->panel1->Size = System::Drawing::Size(120, 98);
this->panel1->TabIndex = 365;
//
// score
//
this->score->BackColor = System::Drawing::Color::SkyBlue;
this->score->Dock = System::Windows::Forms::DockStyle::Bottom;
this->score->Font = (gcnew System::Drawing::Font(L"Arial", 14.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->score->ForeColor = System::Drawing::Color::Black;
this->score->Image = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"score.Image")));
this->score->Location = System::Drawing::Point(0, 35);
this->score->Name = L"score";
this->score->Size = System::Drawing::Size(120, 63);
this->score->TabIndex = 359;
this->score->Text = L"1";
this->score-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// desc
//
this->desc->BackColor = System::Drawing::Color::Transparent;
this->desc->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->desc->Location = System::Drawing::Point(5, 62);
this->desc->Name = L"desc";
this->desc->Size = System::Drawing::Size(348, 49);
this->desc->TabIndex = 366;
this->desc->Text = L"Son you have to work alittle more";
//
// showR
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
this->AutoScaleMode = System::Windows::Forms::AutoScaleMode::Font;
this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^>
(resources->GetObject(L"$this.BackgroundImage")));
this->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->ClientSize = System::Drawing::Size(479, 153);
this->ControlBox = false;
this->Controls->Add(this->start);

```

```

        this->Controls->Add(this->ename);
        this->Controls->Add(this->caln);
        this->Controls->Add(this->panel1);
        this->Controls->Add(this->desc);
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::None;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"showR";
        this->ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"showR";
        this->FormClosing += gcnew
System::Windows::Forms::FormClosingEventHandler(this, &showR::showR_FormClosing);
        this->panel1->ResumeLayout(false);
        this->ResumeLayout(false);

    }

#pragma endregion
    void showD(String^ a , String^ b){
        StreamWriter^ sw = gcnew StreamWriter(Application::ExecutablePath-
>Replace("mExams.exe","config.ms"));
        sw->WriteLine("ETYPE = "+a);
        sw->WriteLine("FILE = user//"+b);
        sw->Close();
        System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("mExams.exe","mCore.exe"))->WaitForExit();
    }
    private: System::Void start_Click(System::Object^ sender, System::EventArgs^ e)
{
    try{
        showD("ED","examdone.ms");

        System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("mExams.exe","mSender.jar"))->WaitForExit();
        showD("E","log.ms");
        Application::Restart();
    }catch (System::Exception^ e){
        MessageBox::Show("We Encountered a Problem. " + e-
>Message + " Try reinstalling the Application");
        Application::Exit();
    }
}
private: System::Void showR_FormClosing(System::Object^ sender,
System::Windows::Forms::FormClosingEventArgs^ e) {

}

};

}

```

x. Lessons (mLessons)

Wait Loading Perimeter Lesson Structure..

1. lessonBase.cpp

```
#include "lessonBase.h"

using namespace mLessons; //the project name in your header file

[STAThreadAttribute]
int main(array<System::String ^> ^args)
{
    Application::EnableVisualStyles();
    Application::SetCompatibleTextRenderingDefault(false);

    Application::Run(gcnew lessonBase());
    return 0;
}
```

2. lessonBase.h

```
#pragma once
#include <stdlib.h>
#include "peri.h"
#include "formu.h"

namespace mLessons {

    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::IO;

    /// <summary>
    /// Summary for lessonBase
    /// </summary>
public ref class lessonBase : public System::Windows::Forms::Form
{
public:
    lessonBase(void)
    {
        InitializeComponent();
        getData();

    }
private: System::Windows::Forms::Timer^ tim;
private: System::Windows::Forms::Timer^ tim1;
public:
    int lno;
    void getData(){
        try{
            StreamReader^ sr = gcnew StreamReader(Application::ExecutablePath-
>Replace("mLessons.exe","lStart.ms"));
            String^ ename= sr->ReadLine()->Substring(8);
            lno = System::Convert::ToInt16(sr->ReadLine()->Substring(5));
            showM->Text = "Wait Loading " +ename+ " Lesson Structure";
            tim->Enabled=true;
            tim1->Enabled=true;
        }catch (System::Exception^ e){
            MessageBox::Show("We Encountered a Problem. " + e->Message + "
Try reinstalling the Application");
            exit (0);
        }
    }
    void detLesson(){
        switch(lno){
        case 27:{ peri p;
                    p.ShowDialog();
                }
        case 26:{ formu fors;
                    fors.ShowDialog();
                }
        }
    }
}
```

```

        }
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
~lessonBase()
{
    if (components)
    {
        delete components;
    }
}
private: System::Windows::Forms::Label^ showM;
private: System::ComponentModel::.IContainer^ components;
protected:

protected:

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

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
void InitializeComponent(void)
{
    this->components = (gcnew System::ComponentModel::Container());
    System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(lessonBase::typeid));
    this->showM = (gcnew System::Windows::Forms::Label());
    this->tim = (gcnew System::Windows::Forms::Timer(this->components));
    this->tim1 = (gcnew System::Windows::Forms::Timer(this-
>components));
    this->SuspendLayout();
    //
    // showM
    //
    this->showM->BackColor = System::Drawing::Color::Transparent;
    this->showM->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
    this->showM->ForeColor = System::Drawing::Color::White;
    this->showM->Location = System::Drawing::Point(3, 0);
    this->showM->Name = L"showM";
    this->showM->Size = System::Drawing::Size(500, 37);
    this->showM->TabIndex = 0;
    this->showM->Text = L"Wait Loading Arithmatic Progression Lesson
Structure";
    this->showM-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;

```

```

        //
        // tim
        //
        this->tim->Interval = 5000;
        this->tim->Tick += gcnew System::EventHandler(this,
&lessonBase::tim_Tick);
        //
        // tim1
        //
        this->tim1->Tick += gcnew System::EventHandler(this,
&lessonBase::tim1_Tick);
        //
        // lessonBase
        //
        this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
        this->AutoScaleMode = System::Windows::Forms::AutoScaleMode::Font;
        this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
        this->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->ClientSize = System::Drawing::Size(515, 38);
        this->ControlBox = false;
        this->Controls->Add(this->showM);
        this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::None;
        this->MaximizeBox = false;
        this->MinimizeBox = false;
        this->Name = L"lessonBase";
        this->>ShowIcon = false;
        this->ShowInTaskbar = false;
        this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->FormClosing += gcnew
System::Windows::Forms::FormClosingEventHandler(this,
&lessonBase::lessonBase_FormClosing);
        this->Load += gcnew System::EventHandler(this,
&lessonBase::lessonBase_Load);
        this->ResumeLayout(false);

    }
#pragma endregion
    private: System::Void lessonBase_Load(System::Object^ sender, System::EventArgs^
e) {
}
    private: System::Void tim_Tick(System::Object^ sender, System::EventArgs^ e) {
        tim1->Enabled=false;
        tim->Enabled=false;
        this->Hide();
        detLesson();
    }
    private: System::Void tim1_Tick(System::Object^ sender, System::EventArgs^ e) {
        if(showM->Text->Contains("....")){
            showM->Text=showM->Text->Replace("....","");
        }
        showM->Text=showM->Text +".";
    }
}

```

```

private: System::Void lessonBase_FormClosing(System::Object^  sender,
System::Windows::Forms::FormClosingEventArgs^  e) {
    try{

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("mLessons.exe","MOLE.exe"));
    }catch(Exception^ ex){
        MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
    }
}
};
}

```

3. resource.h

```

//{{NO_DEPENDENCIES}}
// Microsoft Visual C++ generated include file.
// Used by mLessons.rc
//
#define IDI_ICON2          102
#define IDI_ICON1          103

// Next default values for new objects
//
#ifndef APSTUDIO_INVOKED
#ifndef APSTUDIO_READONLY_SYMBOLS
#define _APS_NEXT_RESOURCE_VALUE    104
#define _APS_NEXT_COMMAND_VALUE     40001
#define _APS_NEXT_CONTROL_VALUE     1001
#define _APS_NEXT_SYMED_VALUE       101
#endif
#endif

```

4. resource1.h

```

//{{NO_DEPENDENCIES}}
// Microsoft Visual C++ generated include file.
// Used by mLessons.rc
//
#define IDI_ICON1          101

// Next default values for new objects
//
#ifndef APSTUDIO_INVOKED
#ifndef APSTUDIO_READONLY_SYMBOLS
#define _APS_NEXT_RESOURCE_VALUE    102
#define _APS_NEXT_COMMAND_VALUE     40001
#define _APS_NEXT_CONTROL_VALUE     1001
#define _APS_NEXT_SYMED_VALUE       101
#endif
#endif

```

5. peri.cpp (Perimeter)

MOLE Lesson - Perimeter

W H A T I S

Perimeter ?

Perimeter is the length of a boundary or the scope of a closed plane figure.

When you want to measure the boundary of a land, pool, room, etc we use the concept of perimeter.

Perimeter can be calculated even for indefinite figures, it is not necessary to have a definite shape always like rectangle, square, triangle, circle or the other shapes.

These Examples will help you to understand Perimeter

Example 1 | Example 2 | Example 3 | Example 4 | Example 5

Example 1

The following figure is a track of a playground. Find the perimeter of the track.

Perimeter of the sector = $2 \times (22 \div 7) \times 7 \times (1 \div 2)$
 $= 22\text{m}$

Equations Used

$P = 2(W+L)$	Rectangle
$P = 4L$	Square
Circle	$P = 2\pi r$
Sector	$P = (\theta / 360) * 2\pi r$

MOLE Lesson - Perimeter

W H A T I S

Perimeter ?

Perimeter is the length of a boundary or the scope of a closed plane figure.

When you want to measure the boundary of a land, pool, room, etc we use the concept of perimeter.

Perimeter can be calculated even for indefinite figures, it is not necessary to have a definite shape always like rectangle, square, triangle, circle or the other shapes.

These Examples will help you to understand Perimeter

Example 1 | Example 2 | Example 3 | Example 4 | Example 5

Example 2

Find the perimeter of circular sector

The length of the arch of radius 35cm = $(90 \div 360) \times 2 \times (22 \div 7) \times 35$
 $= 55\text{cm}$

The length of 2 radii = 70cm

Perimeter of the figure = $70 + 55 = 125\text{cm}$

Equations Used

$P = 2(W+L)$	Rectangle
$P = 4L$	Square
Circle	$P = 2\pi r$
Sector	$P = (\theta / 360) * 2\pi r$

MOLE Lesson - Perimeter

W H A T I S

Perimeter

Learn how to solve hard problem
Perimeter Calculator

Perimeter is the length of a boundary or the scope of a closed plane figure.

When you want to measure the boundary of a land, pool, room, etc we use the concept of perimeter.

Perimeter can be calculated even for indefinite figures, it is not necessary to have a definite shape always like rectangle, square, triangle, circle or the other shapes.

These Examples will help you to understand Perimeter

Example 1 | Example 2 | Example 3 | Example 4 | Example 5

Example 3

The following figure depicts a circular sector type plot of land. Its angle is 60° and perimeter is 35m. Calculate radius (r).

The circular length of radius $r = (60 \div 360) \times 2\pi(22 \div 7) \times r$
 $= 22r + 21$

The length of two radii = 2r
 Perimeter of land = $22r + 21 + 2r$
 $\therefore (22r + 21 + 2)r = 35$
 $\therefore (64 + 21)r = 35$
 Radius (r) $\therefore (35 \times 21) \div 64$
 Radius (r) $= 735 \div 64$
 Radius (r) $= 11.48 \text{ m}$

Equations Used

$P = 2(W+L)$	Rectangle
$P = 4L$	Square
Circle	$P = A+B+C$
$P = (θ / 360) * 2πr$	Sector

MOLE Lesson - Perimeter

W H A T I S

Perimeter

Learn how to solve hard problem
Perimeter Calculator

Perimeter is the length of a boundary or the scope of a closed plane figure.

When you want to measure the boundary of a land, pool, room, etc we use the concept of perimeter.

Perimeter can be calculated even for indefinite figures, it is not necessary to have a definite shape always like rectangle, square, triangle, circle or the other shapes.

These Examples will help you to understand Perimeter

Example 1 | Example 2 | Example 3 | Example 4 | Example 5

Example 4

Calculate the perimeter of the shaded area.

The perimeter of two small sectors $= 2 \times (22 \div 7) \times 3.5 \times (1 \div 2) \times 2$
 $= 22 \text{ cm}$

The perimeter of the large sector $= 2 \times (22 \div 7) \times 7 \times (1 \div 2)$
 $= 22 \text{ cm}$

Perimeter of the shaded area $= 22 + 22$
 $= 44 \text{ cm}$

Equations Used

$P = 2(W+L)$	Rectangle
$P = 4L$	Square
Circle	$P = A+B+C$
$P = (θ / 360) * 2πr$	Sector

MOLE Lesson - Perimeter

W H A T I S

Perimeter ?

Learn how to solve hard problem
Perimeter Calculator

Perimeter is the length of a boundary or the scope of a closed plane figure.

When you want to measure the boundary of a land, pool, room, etc we use the concept of perimeter.

Perimeter can be calculated even for indefinite figures, it is not necessary to have a definite shape always like rectangle, square, triangle, circle or the other shapes.

These Examples will help you to understand Perimeter

Example 1 Example 2 Example 3 Example 4 Example 5

Example 5
Find the perimeter of the shaded area.

The length of the arc of radius 3.5cm = $\frac{2}{7} \times (22 \div 7) \times 3.5 \times (1 \div 2)$
 $= 11\text{cm}$
 $= 44\text{cm}$

The length of 4 circular arcs
 $= 14 + 14 = 28$
 $= 44 + 28$
 $= 72\text{cm}$

Equations Used

$P = 2(W+L)$	Rectangle
$P = 4L$	Square
Circle	$P = 2\pi r$
Sector	$P = (\theta / 360) * 2\pi r$
Triangle	$P = A+B+C$

```
#include "peri.h"
```

6. peri.h

```
#pragma once
#include <stdlib.h>
namespace mLessons {

    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 peri
    /// </summary>
    public ref class peri : public System::Windows::Forms::Form
    {
public:
    peri(void)
    {
        InitializeComponent();
        //
        //TODO: Add the constructor code here
        //
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    ~peri()
    {
        if (components)
        {
            delete components;
        }
        exit(0);
    }

private:

internal:

internal:

private: System::Windows::Forms::Panel^ panel3;
```

```
private:

internal:

internal: System::Windows::Forms::TabControl^ TabControl1;
private:
internal: System::Windows::Forms::TabPage^ tabPage1;

internal: System::Windows::Forms::Label^ Label8;

internal: System::Windows::Forms::TabPage^ tabPage2;
internal: System::Windows::Forms::TabPage^ tabPage3;
internal: System::Windows::Forms::TabPage^ tabPage4;

private: System::Windows::Forms::Label^ label6;
private: System::Windows::Forms::PictureBox^ pictureBox3;
private: System::Windows::Forms::PictureBox^ pictureBox4;
private: System::Windows::Forms::TabPage^ tabPage5;
private: System::Windows::Forms::PictureBox^ pictureBox5;
private: System::Windows::Forms::PictureBox^ pictureBox6;
private: System::Windows::Forms::PictureBox^ pictureBox7;
private: System::Windows::Forms::Panel^ panel1;
internal: System::Windows::Forms::Label^ label2;
private:
internal: System::Windows::Forms::Label^ label7;
private: System::Windows::Forms::Button^ button1;
internal:
private: System::Windows::Forms::Label^ label3;
private: System::Windows::Forms::Panel^ panel4;
internal: System::Windows::Forms::Label^ label5;
private:
internal: System::Windows::Forms::Label^ label4;
private: System::Windows::Forms::PictureBox^ pictureBox2;
internal:

private:

internal:

private:
internal:

internal:
private:

internal:
private:

internal:
private:
```

```

protected:

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
    System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(peri::typeid));
        this->panel3 = (gcnew System::Windows::Forms::Panel());
        this->TabControl1 = (gcnew System::Windows::Forms::TabControl());
        this->TabPage1 = (gcnew System::Windows::Forms::TabPage());
        this->pictureBox3 = (gcnew System::Windows::Forms::PictureBox());
        this->Label8 = (gcnew System::Windows::Forms::Label());
        this->TabPage2 = (gcnew System::Windows::Forms::TabPage());
        this->pictureBox4 = (gcnew System::Windows::Forms::PictureBox());
        this->TabPage3 = (gcnew System::Windows::Forms::TabPage());
        this->pictureBox5 = (gcnew System::Windows::Forms::PictureBox());
        this->TabPage4 = (gcnew System::Windows::Forms::TabPage());
        this->pictureBox6 = (gcnew System::Windows::Forms::PictureBox());
        this->tabPage5 = (gcnew System::Windows::Forms::TabPage());
        this->pictureBox7 = (gcnew System::Windows::Forms::PictureBox());
        this->label6 = (gcnew System::Windows::Forms::Label());
        this->panel1 = (gcnew System::Windows::Forms::Panel());
        this->label2 = (gcnew System::Windows::Forms::Label());
        this->label7 = (gcnew System::Windows::Forms::Label());
        this->button1 = (gcnew System::Windows::Forms::Button());
        this->label3 = (gcnew System::Windows::Forms::Label());
        this->panel4 = (gcnew System::Windows::Forms::Panel());
        this->pictureBox2 = (gcnew System::Windows::Forms::PictureBox());
        this->label5 = (gcnew System::Windows::Forms::Label());
        this->label4 = (gcnew System::Windows::Forms::Label());
        this->TabControl1->SuspendLayout();
        this->TabPage1->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox3))->BeginInit();
        this->TabPage2->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox4))->BeginInit();
        this->TabPage3->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox5))->BeginInit();
        this->TabPage4->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox6))->BeginInit();
        this->tabPage5->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox7))->BeginInit();
        this->panel1->SuspendLayout();
        this->panel4->SuspendLayout();

```

```

(cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->pictureBox2))->BeginInit();
    this->SuspendLayout();
    //
    // panel3
    //
    this->panel3->BackColor = System::Drawing::Color::Black;
    this->panel3->Location = System::Drawing::Point(-1, 207);
    this->panel3->Name = L"panel3";
    this->panel3->Size = System::Drawing::Size(800, 1);
    this->panel3->TabIndex = 154;
    //
    // TabControl1
    //
    this->TabControl1->Controls->Add(this->TabPage1);
    this->TabControl1->Controls->Add(this->TabPage2);
    this->TabControl1->Controls->Add(this->TabPage3);
    this->TabControl1->Controls->Add(this->TabPage4);
    this->TabControl1->Controls->Add(this->tabPage5);
    this->TabControl1->Cursor = System::Windows::Forms::Cursors::Hand;
    this->TabControl1->Location = System::Drawing::Point(18, 233);
    this->TabControl1->Multiline = true;
    this->TabControl1->Name = L"TabControl1";
    this->TabControl1->SelectedIndex = 0;
    this->TabControl1->Size = System::Drawing::Size(517, 389);
    this->TabControl1->TabIndex = 160;
    //
    // tabPage1
    //
    this->TabPage1->BackColor = System::Drawing::Color::Transparent;
    this->TabPage1->Controls->Add(this->pictureBox3);
    this->TabPage1->Controls->Add(this->Label8);
    this->TabPage1->Location = System::Drawing::Point(4, 22);
    this->TabPage1->Name = L"TabPage1";
    this->TabPage1->Padding = System::Windows::Forms::Padding(3);
    this->TabPage1->Size = System::Drawing::Size(509, 363);
    this->TabPage1->TabIndex = 0;
    this->TabPage1->Text = L"Example 1";
    //
    // pictureBox3
    //
    this->pictureBox3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources->GetObject(L"pictureBox3.BackgroundImage")));
    this->pictureBox3->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
    this->pictureBox3->Dock = System::Windows::Forms::DockStyle::Fill;
    this->pictureBox3->Location = System::Drawing::Point(3, 3);
    this->pictureBox3->Name = L"pictureBox3";
    this->pictureBox3->Size = System::Drawing::Size(503, 357);
    this->pictureBox3->TabIndex = 117;
    this->pictureBox3->TabStop = false;
    //
    // Label8
    //
    this->Label8->Location = System::Drawing::Point(17, 24);
    this->Label8->MaximumSize = System::Drawing::Size(460, 0);
    this->Label8->Name = L"Label8";

```

```

        this->Label8->Size = System::Drawing::Size(460, 0);
        this->Label8->TabIndex = 116;
        this->Label8->Text = L"The following figure depicts a circular
sector type plot of land. Its angle is 60"
        L"° and perimeter is 35m. Calculate radius (r).\r\n";
        this->Label8-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// tabPage2
//
this->TabPage2->BackColor = System::Drawing::Color::White;
this->TabPage2->Controls->Add(this->pictureBox4);
this->TabPage2->Location = System::Drawing::Point(4, 22);
this->TabPage2->Name = L"TabPage2";
this->TabPage2->Padding = System::Windows::Forms::Padding(3);
this->TabPage2->Size = System::Drawing::Size(509, 363);
this->TabPage2->TabIndex = 1;
this->TabPage2->Text = L"Example 2";
//
// pictureBox4
//
this->pictureBox4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox4.BackgroundImage")));
this->pictureBox4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->pictureBox4->Dock = System::Windows::Forms::DockStyle::Fill;
this->pictureBox4->Location = System::Drawing::Point(3, 3);
this->pictureBox4->Name = L"pictureBox4";
this->pictureBox4->Size = System::Drawing::Size(503, 357);
this->pictureBox4->TabIndex = 118;
this->pictureBox4->TabStop = false;
//
// tabPage3
//
this->TabPage3->BackColor = System::Drawing::Color::White;
this->TabPage3->Controls->Add(this->pictureBox5);
this->TabPage3->Location = System::Drawing::Point(4, 22);
this->TabPage3->Name = L"TabPage3";
this->TabPage3->Size = System::Drawing::Size(509, 363);
this->TabPage3->TabIndex = 2;
this->TabPage3->Text = L"Example 3";
//
// pictureBox5
//
this->pictureBox5->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox5.BackgroundImage")));
this->pictureBox5->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->pictureBox5->Dock = System::Windows::Forms::DockStyle::Fill;
this->pictureBox5->Location = System::Drawing::Point(0, 0);
this->pictureBox5->Name = L"pictureBox5";
this->pictureBox5->Size = System::Drawing::Size(509, 363);
this->pictureBox5->TabIndex = 119;
this->pictureBox5->TabStop = false;
//
// tabPage4

```

```

//  

this->TabPage4->BackColor = System::Drawing::Color::White;  

this->TabPage4->Controls->Add(this->pictureBox6);  

this->TabPage4->Location = System::Drawing::Point(4, 22);  

this->TabPage4->Name = L"TabPage4";  

this->TabPage4->Size = System::Drawing::Size(509, 363);  

this->TabPage4->TabIndex = 3;  

this->TabPage4->Text = L"Example 4";  

//  

// pictureBox6  

//  

this->pictureBox6->BackgroundImage =  

(cli::safe_cast<System::Drawing::Image^>(resources-  

>GetObject(L"pictureBox6.BackgroundImage")));  

this->pictureBox6->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->pictureBox6->Dock = System::Windows::Forms::DockStyle::Fill;  

this->pictureBox6->Location = System::Drawing::Point(0, 0);  

this->pictureBox6->Name = L"pictureBox6";  

this->pictureBox6->Size = System::Drawing::Size(509, 363);  

this->pictureBox6->TabIndex = 120;  

this->pictureBox6->TabStop = false;  

//  

// tabPage5  

//  

this->tabPage5->Controls->Add(this->pictureBox7);  

this->tabPage5->Location = System::Drawing::Point(4, 22);  

this->tabPage5->Name = L"tabPage5";  

this->tabPage5->Size = System::Drawing::Size(509, 363);  

this->tabPage5->TabIndex = 4;  

this->tabPage5->Text = L"Example 5";  

this->tabPage5->UseVisualStyleBackColor = true;  

//  

// pictureBox7  

//  

this->pictureBox7->BackgroundImage =  

(cli::safe_cast<System::Drawing::Image^>(resources-  

>GetObject(L"pictureBox7.BackgroundImage")));  

this->pictureBox7->BackgroundImageLayout =  

System::Windows::Forms::ImageLayout::Stretch;  

this->pictureBox7->Dock = System::Windows::Forms::DockStyle::Fill;  

this->pictureBox7->Location = System::Drawing::Point(0, 0);  

this->pictureBox7->Name = L"pictureBox7";  

this->pictureBox7->Size = System::Drawing::Size(509, 363);  

this->pictureBox7->TabIndex = 121;  

this->pictureBox7->TabStop = false;  

//  

// label6  

//  

this->label6->AutoSize = true;  

this->label6->BackColor = System::Drawing::Color::Transparent;  

this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 9,  

System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,  

static_cast<System::Byte>(0)));  

this->label6->Location = System::Drawing::Point(16, 214);  

this->label6->Name = L"label6";  

this->label6->Size = System::Drawing::Size(315, 15);  

this->label6->TabIndex = 161;

```

```

this->label6->Text = L"These Examples will help you to understand
Perimeter";
//
// panel1
//
this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel1.BackgroundImage")));
this->panel1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->panel1->Controls->Add(this->label12);
this->panel1->Controls->Add(this->label17);
this->panel1->Controls->Add(this->button1);
this->panel1->Dock = System::Windows::Forms::DockStyle::Top;
this->panel1->Location = System::Drawing::Point(0, 0);
this->panel1->Name = L"panel1";
this->panel1->Size = System::Drawing::Size(754, 100);
this->panel1->TabIndex = 162;
//
// label2
//
this->label2->BackColor = System::Drawing::Color::Gold;
this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 14.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label2->ForeColor = System::Drawing::Color::Black;
this->label2->Location = System::Drawing::Point(10, 63);
this->label2->Name = L"label2";
this->label2->Size = System::Drawing::Size(242, 25);
this->label2->TabIndex = 160;
this->label2->Text = L"Perimeter";
this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// label7
//
this->label7->BackColor = System::Drawing::Color::Transparent;
this->label7->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label7->Location = System::Drawing::Point(180, 97);
this->label7->Name = L"label7";
this->label7->Size = System::Drawing::Size(74, 20);
this->label7->TabIndex = 156;
this->label7->Text = L"Grade 10";
this->label7-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// button1
//
this->button1->BackColor = System::Drawing::Color::DarkSlateGray;
this->button1->Cursor = System::Windows::Forms::Cursors::Hand;
this->button1->FlatStyle = System::Windows::Forms::FlatStyle::Popup;
this->button1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->button1->ForeColor = System::Drawing::Color::White;
this->button1->Location = System::Drawing::Point(589, 34);

```

```

this->button1->Name = L"button1";
this->button1->Size = System::Drawing::Size(140, 38);
this->button1->TabIndex = 157;
this->button1->Text = L"Perimeter Calculator";
this->button1->UseVisualStyleBackColor = false;
//
// label3
//
this->label3->BackColor = System::Drawing::Color::Transparent;
this->label3->ForeColor = System::Drawing::Color::Black;
this->label3->Location = System::Drawing::Point(2, 109);
this->label3->Name = L"label3";
this->label3->Size = System::Drawing::Size(533, 95);
this->label3->TabIndex = 163;
this->label3->Text = resources->GetString(L"label3.Text");
//
// panel4
//
this->panel4->BackColor = System::Drawing::Color::Transparent;
this->panel4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"panel4.BackgroundImage")));
this->panel4->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
this->panel4->Controls->Add(this->label5);
this->panel4->Controls->Add(this->label4);
this->panel4->Controls->Add(this->pictureBox2);
this->panel4->Location = System::Drawing::Point(554, 103);
this->panel4->Name = L"panel4";
this->panel4->Size = System::Drawing::Size(200, 430);
this->panel4->TabIndex = 164;
//
// pictureBox2
//
this->pictureBox2->BackColor = System::Drawing::Color::Transparent;
this->pictureBox2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox2.BackgroundImage")));
this->pictureBox2->Location = System::Drawing::Point(0, 1);
this->pictureBox2->Name = L"pictureBox2";
this->pictureBox2->Size = System::Drawing::Size(200, 430);
this->pictureBox2->TabIndex = 160;
this->pictureBox2->TabStop = false;
//
// label5
//
this->label5->AutoSize = true;
this->label5->BackColor = System::Drawing::Color::Transparent;
this->label5->Location = System::Drawing::Point(149, 59);
this->label5->Name = L"label5";
this->label5->Size = System::Drawing::Size(32, 13);
this->label5->TabIndex = 159;
this->label5->Text = L"Used";
//
// label4
//
this->label4->AutoSize = true;
this->label4->BackColor = System::Drawing::Color::Transparent;

```

```

        this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 24,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                static_cast<System::Byte>(0)));
        this->label4->Location = System::Drawing::Point(35, 29);
        this->label4->Name = L"label4";
        this->label4->Size = System::Drawing::Size(155, 36);
        this->label4->TabIndex = 158;
        this->label4->Text = L"Equations";
    //
    // peri
    //
    this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
    this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
    this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
(resources->GetObject(L"$this.BackgroundImage")));
    this->ClientSize = System::Drawing::Size(754, 628);
    this->Controls->Add(this->panel4);
    this->Controls->Add(this->panel1);
    this->Controls->Add(this->label6);
    this->Controls->Add(this->TabControl1);
    this->Controls->Add(this->label3);
    this->Controls->Add(this->panel3);
    this->ForeColor = System::Drawing::Color::Black;
    this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
    this->MaximizeBox = false;
    this->MinimizeBox = false;
    this->Name = L"peri";
    this->ShowIcon = false;
    this->ShowInTaskbar = false;
    this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Hide;
    this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
    this->Text = L"MOLE Lesson - Perimeter";
    this->FormClosing += gcnew
System::Windows::Forms::FormClosingEventHandler(this, &peri::peri_FormClosing);
    this->TabControl1->ResumeLayout(false);
    this->TabPage1->ResumeLayout(false);
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox3))->EndInit();
    this->TabPage2->ResumeLayout(false);
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox4))->EndInit();
    this->TabPage3->ResumeLayout(false);
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox5))->EndInit();
    this->TabPage4->ResumeLayout(false);
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox6))->EndInit();
    this->tabPage5->ResumeLayout(false);
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox7))->EndInit();
    this->panel1->ResumeLayout(false);
    this->panel4->ResumeLayout(false);
    this->panel4->PerformLayout();
    (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox2))->EndInit();
    this->ResumeLayout(false);

```

```

        this->PerformLayout();

    }

#pragma endregion
    private: System::Void lblNs_Click(System::Object^  sender, System::EventArgs^  e)
{
    }

private: System::Void lblLn_Click(System::Object^  sender, System::EventArgs^  e) {
    }

private: System::Void peri_FormClosing(System::Object^  sender,
System::Windows::Forms::FormClosingEventArgs^  e) {
    try{

System::Diagnostics::Process::Start(Application::ExecutablePath-
>Replace("mLessons.exe","MOLE.exe"));
    }catch(Exception^  ex){
        MessageBox::Show("We Encountered a Problem. " + ex->Message +
" Restart the Application and Try Again.");
    }
}

};

}

```

7. formu.cpp (Formulae)

The screenshot shows a software interface for a MOLE Lesson on Formulae. The title bar says "MOLE Lesson - Formulae". The main header features a "WHAT IS" banner with the word "Formulae" in the center and a question mark icon on the right. A "Learn how to solve hard problem" button is in the top right, and a "No Calculator" button is below it.

Changing the subject of formulae involving powers and roots

You might recall studying Formulae in previous grades. Basically, it's an equation which is made up of 2 or more quantities, which are related to each other.

Up to now, you have fluency in changing the subject of formulae. If needs reminding, a Subject is the single unknown term on the left of the equal-sign. In this lesson, we'll be seeing how to change said subject to find different terms; but with formulae which have powers and roots in them.

Substitution

One of the easiest concepts of equations and formulae, this merely involves replacing the terms with the values given for them and getting the relevant term from them. If only one term is unknown, then it could be gotten from the other known terms.

Applications

Using Formulae, we can solve lots of problems in day-to-day scenarios. One such small example is given in Example 3.

Example 1
Changing the subject of formulae involving powers and roots
Make p the subject of the formula: $q = \sqrt{b^2 + p^2}$

When you first approach something like this, don't get scared. Carefully ponder how to get the p term out of the formula:

$$q^2 = b^2 + p^2$$

A simple interchange and you get:

$$p^2 = q^2 - b^2$$

Example 2
 $d^2 = (b - c)^2 + 5e$ if $b=-716$, $c=-89$ and $e=56$, what is the value of d?

First of all substitute the values for the terms, and you get

$$=(-716 - 89)^2 + 5 \times 56$$

Then, calculate the values and you'll get p^2 as

$$\begin{aligned} p^2 &= -63,7242+280 \\ &= 4,060,748,176+280 \\ &= 4,060,176,456 \end{aligned}$$

To get p , simply get the square root as

Example 3
Hashan has bought 2 pens to write with at the start of a particular month. If he uses a pen for 1 whole month, how many more pens (r) would he need at the end of several months (n)?

To solve this question, we can develop a formula by taking the terms and placing them where appropriate as follows-

$$r = n - 2$$

```
#include "formu.h"
```

8. formu.h (Formulae)

```
#pragma once
#include <stdlib.h>
namespace mLessons {

    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 formu
    /// </summary>
    public ref class formu : public System::Windows::Forms::Form
    {
public:
    formu(void)
    {
        InitializeComponent();
        //
        //TODO: Add the constructor code here
        //
    }

protected:
    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    ~formu()
    {
        if (components)
        {
            delete components;
        }
        exit(0);
    }
private: System::Windows::Forms::Panel^ panel1;
protected:

private:
internal:

private:
internal: System::Windows::Forms::Label^ label2;

private: System::Windows::Forms::Panel^ panel2;
internal:
private:

internal: System::Windows::Forms::Label^ label5;
private: System::Windows::Forms::Label^ label6;
internal: System::Windows::Forms::Label^ label1;
```

```
internal:

private: System::Windows::Forms::Panel^ panel4;
internal:
private: System::Windows::Forms::PictureBox^ pictureBox4;
private: System::Windows::Forms::Label^ label12;
private: System::Windows::Forms::PictureBox^ pictureBox3;
private: System::Windows::Forms::Label^ label11;
private: System::Windows::Forms::PictureBox^ pictureBox2;
private: System::Windows::Forms::Label^ label10;
private: System::Windows::Forms::PictureBox^ pictureBox1;
private: System::Windows::Forms::Label^ label9;
private: System::Windows::Forms::Label^ label8;
internal: System::Windows::Forms::Label^ label7;
private: System::Windows::Forms::Panel^ panel3;
internal:
private: System::Windows::Forms::Panel^ panel5;

private: System::Windows::Forms::Label^ label3;

private: System::Windows::Forms::Label^ label4;

private: System::Windows::Forms::Label^ label13;
private: System::Windows::Forms::PictureBox^ pictureBox8;
private: System::Windows::Forms::Label^ label14;

internal: System::Windows::Forms::Label^ label16;
private:
private: System::Windows::Forms::Label^ label17;
internal:
internal: System::Windows::Forms::Label^ label18;
private: System::Windows::Forms::Button^ button1;
private: System::Windows::Forms::Panel^ panel6;
private: System::Windows::Forms::Panel^ panel7;
private: System::Windows::Forms::Label^ label15;

internal: System::Windows::Forms::Label^ label22;
private:
private: System::Windows::Forms::Label^ label23;
internal:
internal: System::Windows::Forms::Label^ label24;
private:
internal:
private:
private:
private:
private:
private:
private:
internal:
internal:
private:
internal:
```

```

private:
    /// <summary>
    /// Required designer variable.
    /// </summary>
    System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    void InitializeComponent(void)
    {
        System::ComponentModel::ComponentResourceManager^ resources =
(gcnew System::ComponentModel::ComponentResourceManager(formu::typeid));
        this->panel1 = (gcnew System::Windows::Forms::Panel());
        this->label2 = (gcnew System::Windows::Forms::Label());
        this->panel2 = (gcnew System::Windows::Forms::Panel());
        this->label5 = (gcnew System::Windows::Forms::Label());
        this->label6 = (gcnew System::Windows::Forms::Label());
        this->label1 = (gcnew System::Windows::Forms::Label());
        this->panel4 = (gcnew System::Windows::Forms::Panel());
        this->label7 = (gcnew System::Windows::Forms::Label());
        this->label8 = (gcnew System::Windows::Forms::Label());
        this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
        this->label9 = (gcnew System::Windows::Forms::Label());
        this->label10 = (gcnew System::Windows::Forms::Label());
        this->pictureBox2 = (gcnew System::Windows::Forms::PictureBox());
        this->label11 = (gcnew System::Windows::Forms::Label());
        this->pictureBox3 = (gcnew System::Windows::Forms::PictureBox());
        this->label12 = (gcnew System::Windows::Forms::Label());
        this->pictureBox4 = (gcnew System::Windows::Forms::PictureBox());
        this->panel3 = (gcnew System::Windows::Forms::Panel());
        this->panel5 = (gcnew System::Windows::Forms::Panel());
        this->label3 = (gcnew System::Windows::Forms::Label());
        this->label4 = (gcnew System::Windows::Forms::Label());
        this->label13 = (gcnew System::Windows::Forms::Label());
        this->pictureBox8 = (gcnew System::Windows::Forms::PictureBox());
        this->label14 = (gcnew System::Windows::Forms::Label());
        this->label16 = (gcnew System::Windows::Forms::Label());
        this->label17 = (gcnew System::Windows::Forms::Label());
        this->label18 = (gcnew System::Windows::Forms::Label());
        this->button1 = (gcnew System::Windows::Forms::Button());
        this->panel6 = (gcnew System::Windows::Forms::Panel());
        this->panel7 = (gcnew System::Windows::Forms::Panel());
        this->label15 = (gcnew System::Windows::Forms::Label());
        this->label22 = (gcnew System::Windows::Forms::Label());
        this->label23 = (gcnew System::Windows::Forms::Label());
        this->label24 = (gcnew System::Windows::Forms::Label());
        this->panel1->SuspendLayout();
        this->panel2->SuspendLayout();
        this->panel4->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->pictureBox1))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->pictureBox2))->BeginInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this->pictureBox3))->BeginInit();

```

```

        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox4))->BeginInit();
        this->panel3->SuspendLayout();
        this->panel5->SuspendLayout();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^ >(this-
>pictureBox8))->BeginInit();
        this->panel6->SuspendLayout();
        this->panel7->SuspendLayout();
        this->SuspendLayout();
        //
        // panel1
        //
        this->panel1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^ >(resources-
>GetObject(L"panel1.BackgroundImage")));
        this->panel1->BackgroundImageLayout =
System::Windows::Forms::ImageLayout::Stretch;
        this->panel1->Controls->Add(this->label1);
        this->panel1->Controls->Add(this->label2);
        this->panel1->Controls->Add(this->button1);
        this->panel1->Dock = System::Windows::Forms::DockStyle::Top;
        this->panel1->Location = System::Drawing::Point(0, 0);
        this->panel1->Name = L"panel1";
        this->panel1->Size = System::Drawing::Size(754, 100);
        this->panel1->TabIndex = 154;
        //
        // label2
        //
        this->label2->BackColor = System::Drawing::Color::Transparent;
        this->label2->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label2->Location = System::Drawing::Point(180, 97);
        this->label2->Name = L"label2";
        this->label2->Size = System::Drawing::Size(74, 20);
        this->label2->TabIndex = 156;
        this->label2->Text = L"Grade 10";
        this->label2-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
        // panel2
        //
        this->panel2->BackColor = System::Drawing::Color::Transparent;
        this->panel2->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->panel2->Controls->Add(this->panel4);
        this->panel2->Controls->Add(this->label16);
        this->panel2->Controls->Add(this->label5);
        this->panel2->ForeColor = System::Drawing::Color::White;
        this->panel2->Location = System::Drawing::Point(4, 105);
        this->panel2->Name = L"panel2";
        this->panel2->Size = System::Drawing::Size(738, 174);
        this->panel2->TabIndex = 155;
        //
        // label5
        //
        this->label5->BackColor = System::Drawing::Color::DarkSlateGray;

```

```

        this->label5->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label5->Location = System::Drawing::Point(0, 0);
        this->label5->Name = L"label5";
        this->label5->Size = System::Drawing::Size(379, 28);
        this->label5->TabIndex = 160;
        this->label5->Text = L"Changing the subject of formulae involving
powers and roots";
        this->label5-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
        //
// label6
//
this->label6->BackColor = System::Drawing::Color::Transparent;
this->label6->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label6->ForeColor = System::Drawing::Color::Black;
        this->label6->Location = System::Drawing::Point(2, 31);
        this->label6->Name = L"label6";
        this->label6->Size = System::Drawing::Size(394, 137);
        this->label6->TabIndex = 160;
        this->label6->Text = resources->GetString(L"label6.Text");
//
// label1
//
this->label1->BackColor = System::Drawing::Color::Gold;
this->label1->Font = (gcnew System::Drawing::Font(L"Arial", 14.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label1->ForeColor = System::Drawing::Color::Black;
        this->label1->Location = System::Drawing::Point(10, 63);
        this->label1->Name = L"label1";
        this->label1->Size = System::Drawing::Size(242, 25);
        this->label1->TabIndex = 160;
        this->label1->Text = L"Formulae";
        this->label1-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// panel4
//
this->panel4->AutoScroll = true;
this->panel4->BackColor = System::Drawing::Color::Transparent;
this->panel4->Controls->Add(this->pictureBox4);
this->panel4->Controls->Add(this->label12);
this->panel4->Controls->Add(this->pictureBox3);
this->panel4->Controls->Add(this->label11);
this->panel4->Controls->Add(this->pictureBox2);
this->panel4->Controls->Add(this->label10);
this->panel4->Controls->Add(this->pictureBox1);
this->panel4->Controls->Add(this->label19);
this->panel4->Controls->Add(this->label18);
this->panel4->Controls->Add(this->label17);
this->panel4->Dock = System::Windows::Forms::DockStyle::Right;
this->panel4->ForeColor = System::Drawing::Color::White;
this->panel4->Location = System::Drawing::Point(390, 0);
this->panel4->Name = L"panel4";

```

```

this->panel4->Size = System::Drawing::Size(346, 172);
this->panel4->TabIndex = 161;
//
// label7
//
this->label7->BackColor = System::Drawing::Color::Transparent;
this->label7->Dock = System::Windows::Forms::DockStyle::Top;
this->label7->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label7->ForeColor = System::Drawing::Color::Black;
this->label7->Location = System::Drawing::Point(0, 0);
this->label7->Name = L"label7";
this->label7->Size = System::Drawing::Size(329, 28);
this->label7->TabIndex = 161;
this->label7->Text = L"Example 1";
//
// label8
//
this->label8->BackColor = System::Drawing::Color::Transparent;
this->label8->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label8->ForeColor = System::Drawing::Color::Black;
this->label8->Location = System::Drawing::Point(0, 17);
this->label8->Name = L"label8";
this->label8->Size = System::Drawing::Size(319, 14);
this->label8->TabIndex = 162;
this->label8->Text = L"Changing the subject of formulae involving
powers and roots";
//
// pictureBox1
//
this->pictureBox1->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox1.BackgroundImage")));
this->pictureBox1->Location = System::Drawing::Point(216, 39);
this->pictureBox1->Name = L"pictureBox1";
this->pictureBox1->Size = System::Drawing::Size(86, 25);
this->pictureBox1->TabIndex = 163;
this->pictureBox1->TabStop = false;
//
// label9
//
this->label9->BackColor = System::Drawing::Color::Transparent;
this->label9->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label9->ForeColor = System::Drawing::Color::Black;
this->label9->Location = System::Drawing::Point(26, 43);
this->label9->Name = L"label9";
this->label9->Size = System::Drawing::Size(199, 14);
this->label9->TabIndex = 164;
this->label9->Text = L"Make p the subject of the formula: ";
//
// label10
//
this->label10->BackColor = System::Drawing::Color::Transparent;

```

```

    this->label10->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label10->ForeColor = System::Drawing::Color::Black;
    this->label10->Location = System::Drawing::Point(2, 70);
    this->label10->Name = L"label10";
    this->label10->Size = System::Drawing::Size(317, 35);
    this->label10->TabIndex = 165;
    this->label10->Text = resources->GetString(L"label10.Text");
    //
    // pictureBox2
    //
    this->pictureBox2->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox2.BackgroundImage")));
    this->pictureBox2->Location = System::Drawing::Point(91, 108);
    this->pictureBox2->Name = L"pictureBox2";
    this->pictureBox2->Size = System::Drawing::Size(82, 19);
    this->pictureBox2->TabIndex = 166;
    this->pictureBox2->TabStop = false;
    //
    // label11
    //
    this->label11->BackColor = System::Drawing::Color::Transparent;
    this->label11->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label11->ForeColor = System::Drawing::Color::Black;
    this->label11->Location = System::Drawing::Point(6, 137);
    this->label11->Name = L"label11";
    this->label11->Size = System::Drawing::Size(316, 17);
    this->label11->TabIndex = 167;
    this->label11->Text = L"A simple interchange and you get- ";
    this->label11-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
    //
    // pictureBox3
    //
    this->pictureBox3->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox3.BackgroundImage")));
    this->pictureBox3->Location = System::Drawing::Point(91, 157);
    this->pictureBox3->Name = L"pictureBox3";
    this->pictureBox3->Size = System::Drawing::Size(82, 19);
    this->pictureBox3->TabIndex = 168;
    this->pictureBox3->TabStop = false;
    //
    // label12
    //
    this->label12->BackColor = System::Drawing::Color::Transparent;
    this->label12->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
    this->label12->ForeColor = System::Drawing::Color::Black;
    this->label12->Location = System::Drawing::Point(3, 185);
    this->label12->Name = L"label12";
    this->label12->Size = System::Drawing::Size(316, 108);
    this->label12->TabIndex = 169;

```

```

        this->label12->Text = L"Now, all we need to do is again, root the
right-side of the equation. And you'll "
        L"get p. Notice that p gets un-squared here with the square-
rooting. The square-ro"
        L"ot may be + or - ";
        this->label12->TextAlign =
System::Drawing::ContentAlignment::TopCenter;
//
// pictureBox4
//
this->pictureBox4->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox4.BackgroundImage")));
this->pictureBox4->Location = System::Drawing::Point(90, 244);
this->pictureBox4->Name = L"pictureBox4";
this->pictureBox4->Size = System::Drawing::Size(82, 19);
this->pictureBox4->TabIndex = 170;
this->pictureBox4->TabStop = false;
//
// panel3
//
this->panel3->BackColor = System::Drawing::Color::Transparent;
this->panel3->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
this->panel3->Controls->Add(this->panel5);
this->panel3->Controls->Add(this->label17);
this->panel3->Controls->Add(this->label18);
this->panel3->ForeColor = System::Drawing::Color::White;
this->panel3->Location = System::Drawing::Point(4, 287);
this->panel3->Name = L"panel3";
this->panel3->Size = System::Drawing::Size(738, 174);
this->panel3->TabIndex = 156;
//
// panel5
//
this->panel5->AutoScroll = true;
this->panel5->BackColor = System::Drawing::Color::Transparent;
this->panel5->Controls->Add(this->label3);
this->panel5->Controls->Add(this->label4);
this->panel5->Controls->Add(this->label13);
this->panel5->Controls->Add(this->pictureBox8);
this->panel5->Controls->Add(this->label14);
this->panel5->Controls->Add(this->label16);
this->panel5->Dock = System::Windows::Forms::DockStyle::Right;
this->panel5->ForeColor = System::Drawing::Color::White;
this->panel5->Location = System::Drawing::Point(390, 0);
this->panel5->Name = L"panel5";
this->panel5->Size = System::Drawing::Size(346, 172);
this->panel5->TabIndex = 161;
//
// label3
//
this->label3->BackColor = System::Drawing::Color::Transparent;
this->label3->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label3->ForeColor = System::Drawing::Color::Black;
this->label3->Location = System::Drawing::Point(10, 101);

```

```

        this->label3->Name = L"label3";
        this->label3->Size = System::Drawing::Size(316, 108);
        this->label3->TabIndex = 169;
        this->label3->Text = L"Then, calculate the values and you'll get p2
as \r\np2 = -63,7242+280\r\n      = 4,06"
                           L"0,748,176+280\r\n      = 4,060,176,456\r\nTo get p, simply
get the square root as- \r"
                           L"\np= 63,719.5\r\n";
        this->label3-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label4
        //
        this->label4->BackColor = System::Drawing::Color::Transparent;
        this->label4->Font = (gcnew System::Drawing::Font(L"Arial", 11.25F,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label4->ForeColor = System::Drawing::Color::Black;
        this->label4->Location = System::Drawing::Point(30, 73);
        this->label4->Name = L"label4";
        this->label4->Size = System::Drawing::Size(195, 17);
        this->label4->TabIndex = 167;
        this->label4->Text = L"= (-716 x 89)2 +5 x 56";
        this->label4-> TextAlign =
System::Drawing::ContentAlignment::MiddleLeft;
        //
        // label13
        //
        this->label13->BackColor = System::Drawing::Color::Transparent;
        this->label13->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label13->ForeColor = System::Drawing::Color::Black;
        this->label13->Location = System::Drawing::Point(3, 55);
        this->label13->Name = L"label13";
        this->label13->Size = System::Drawing::Size(323, 35);
        this->label13->TabIndex = 165;
        this->label13->Text = L"First of all substitute the values for the
terms, and you get";
        //
        // pictureBox8
        //
        this->pictureBox8->BackgroundImage =
(cli::safe_cast<System::Drawing::Image^>(resources-
>GetObject(L"pictureBox8.BackgroundImage")));
        this->pictureBox8->Location = System::Drawing::Point(8, 20);
        this->pictureBox8->Name = L"pictureBox8";
        this->pictureBox8->Size = System::Drawing::Size(118, 18);
        this->pictureBox8->TabIndex = 163;
        this->pictureBox8->TabStop = false;
        //
        // label14
        //
        this->label14->BackColor = System::Drawing::Color::Transparent;
        this->label14->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
                           static_cast<System::Byte>(0)));
        this->label14->ForeColor = System::Drawing::Color::Black;

```

```

this->label14->Location = System::Drawing::Point(133, 17);
this->label14->Name = L"label14";
this->label14->Size = System::Drawing::Size(175, 29);
this->label14->TabIndex = 164;
this->label14->Text = L"if b=-716, c=-89 and e=56, \r\nwhat is the
value of d?";
//
// label16
//
this->label16->BackColor = System::Drawing::Color::Transparent;
this->label16->Dock = System::Windows::Forms::DockStyle::Top;
this->label16->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label16->ForeColor = System::Drawing::Color::Black;
this->label16->Location = System::Drawing::Point(0, 0);
this->label16->Name = L"label16";
this->label16->Size = System::Drawing::Size(329, 28);
this->label16->TabIndex = 161;
this->label16->Text = L"Example 2";
//
// label17
//
this->label17->BackColor = System::Drawing::Color::Transparent;
this->label17->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label17->ForeColor = System::Drawing::Color::Black;
this->label17->Location = System::Drawing::Point(2, 31);
this->label17->Name = L"label17";
this->label17->Size = System::Drawing::Size(394, 137);
this->label17->TabIndex = 160;
this->label17->Text = resources->GetString(L"label17.Text");
//
// label18
//
this->label18->BackColor = System::Drawing::Color::DarkSlateGray;
this->label18->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->label18->Location = System::Drawing::Point(0, 0);
this->label18->Name = L"label18";
this->label18->Size = System::Drawing::Size(379, 28);
this->label18->TabIndex = 160;
this->label18->Text = L"Substitution";
this->label18-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// button1
//
this->button1->BackColor = System::Drawing::Color::Transparent;
this->button1->Cursor = System::Windows::Forms::Cursors::Hand;
this->button1->Enabled = false;
this->button1->FlatStyle = System::Windows::Forms::FlatStyle::Flat;
this->button1->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
this->button1->ForeColor = System::Drawing::Color::White;

```

```

        this->button1->Location = System::Drawing::Point(589, 34);
        this->button1->Name = L"button1";
        this->button1->Size = System::Drawing::Size(140, 38);
        this->button1->TabIndex = 157;
        this->button1->Text = L"No Calculator";
        this->button1->UseVisualStyleBackColor = false;
        this->button1->Click += gcnew System::EventHandler(this,
&Formu::button1_Click);
        //
        // panel6
        //
        this->panel6->BackColor = System::Drawing::Color::Transparent;
        this->panel6->BorderStyle =
System::Windows::Forms::BorderStyle::FixedSingle;
        this->panel6->Controls->Add(this->panel7);
        this->panel6->Controls->Add(this->label123);
        this->panel6->Controls->Add(this->label124);
        this->panel6->ForeColor = System::Drawing::Color::White;
        this->panel6->Location = System::Drawing::Point(4, 467);
        this->panel6->Name = L"panel6";
        this->panel6->Size = System::Drawing::Size(738, 174);
        this->panel6->TabIndex = 157;
        //
        // panel7
        //
        this->panel7->AutoScroll = true;
        this->panel7->BackColor = System::Drawing::Color::Transparent;
        this->panel7->Controls->Add(this->label15);
        this->panel7->Controls->Add(this->label122);
        this->panel7->Dock = System::Windows::Forms::DockStyle::Right;
        this->panel7->ForeColor = System::Drawing::Color::White;
        this->panel7->Location = System::Drawing::Point(390, 0);
        this->panel7->Name = L"panel7";
        this->panel7->Size = System::Drawing::Size(346, 172);
        this->panel7->TabIndex = 161;
        //
        // label15
        //
        this->label15->BackColor = System::Drawing::Color::Transparent;
        this->label15->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label15->ForeColor = System::Drawing::Color::Black;
        this->label15->Location = System::Drawing::Point(2, 18);
        this->label15->Name = L"label15";
        this->label15->Size = System::Drawing::Size(316, 200);
        this->label15->TabIndex = 169;
        this->label15->Text = resources->GetString(L"label15.Text");
        //
        // label22
        //
        this->label22->BackColor = System::Drawing::Color::Transparent;
        this->label22->Dock = System::Windows::Forms::DockStyle::Top;
        this->label22->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
static_cast<System::Byte>(0)));
        this->label22->ForeColor = System::Drawing::Color::Black;
        this->label22->Location = System::Drawing::Point(0, 0);

```

```

this->label22->Name = L"label22";
this->label22->Size = System::Drawing::Size(329, 28);
this->label22->TabIndex = 161;
this->label22->Text = L"Example 3";
//
// label23
//
this->label23->BackColor = System::Drawing::Color::Transparent;
this->label23->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label23->ForeColor = System::Drawing::Color::Black;
this->label23->Location = System::Drawing::Point(2, 31);
this->label23->Name = L"label23";
this->label23->Size = System::Drawing::Size(394, 137);
this->label23->TabIndex = 160;
this->label23->Text = L"Using Formulae, we can solve lots of
problems in day-to-day scenarios. One such s"
    L"mall example is given in Example 3.";
//
// label24
//
this->label24->BackColor = System::Drawing::Color::DarkSlateGray;
this->label24->Font = (gcnew System::Drawing::Font(L"Arial", 9,
System::Drawing::FontStyle::Bold, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->label24->Location = System::Drawing::Point(0, 0);
this->label24->Name = L"label24";
this->label24->Size = System::Drawing::Size(379, 28);
this->label24->TabIndex = 160;
this->label24->Text = L"Applications";
this->label24-> TextAlign =
System::Drawing::ContentAlignment::MiddleCenter;
//
// formu
//
this->AutoScaleDimensions = System::Drawing::SizeF(6, 14);
this->AutoSizeMode = System::Windows::Forms::AutoSizeMode::Font;
this->BackgroundImage = (cli::safe_cast<System::Drawing::Image^
>(resources->GetObject(L"$this.BackgroundImage")));
this->ClientSize = System::Drawing::Size(754, 651);
this->Controls->Add(this->panel16);
this->Controls->Add(this->panel13);
this->Controls->Add(this->panel12);
this->Controls->Add(this->panel11);
this->Font = (gcnew System::Drawing::Font(L"Arial", 8.25F,
System::Drawing::FontStyle::Regular, System::Drawing::GraphicsUnit::Point,
    static_cast<System::Byte>(0)));
this->ForeColor = System::Drawing::Color::Black;
this->FormBorderStyle =
System::Windows::Forms::FormBorderStyle::FixedSingle;
this->MaximizeBox = false;
this->MinimizeBox = false;
this->Name = L"formu";
this->ShowIcon = false;
this->ShowInTaskbar = false;
this->SizeGripStyle = System::Windows::Forms::SizeGripStyle::Show;

```

```

        this->StartPosition =
System::Windows::Forms::FormStartPosition::CenterScreen;
        this->Text = L"MOLE Lesson - Formulae";
        this->panel1->ResumeLayout(false);
        this->panel2->ResumeLayout(false);
        this->panel4->ResumeLayout(false);
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox1))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox2))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox3))->EndInit();
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox4))->EndInit();
        this->panel3->ResumeLayout(false);
        this->panel5->ResumeLayout(false);
        (cli::safe_cast<System::ComponentModel::ISupportInitialize^>(this-
>pictureBox8))->EndInit();
        this->panel6->ResumeLayout(false);
        this->panel7->ResumeLayout(false);
        this->ResumeLayout(false);

    }

#pragma endregion
    private: System::Void button1_Click(System::Object^ sender, System::EventArgs^
e) {
}
};

}

```

xi. MOLE Start (MoleStart)



1. mainM.java

```
package molestart;

import org.jdesktop.application.Application;
import org.jdesktop.application.SingleFrameApplication;

public class mainM extends SingleFrameApplication {

    @Override protected void startup() {
        show(new login());
    }

    @Override protected void configureWindow(java.awt.Window root) {
    }
}
```

```
public static mainM getApplication() {  
    return Application.getInstance(mainM.class);  
}  
  
public static void main(String[] args) {  
    launch(mainM.class, args);  
}  
}
```

2. login.java

```
package molestart;

import java.io.PrintWriter;

import javax.swing.ImageIcon;

import javax.swing.JOptionPane;

import java.net.*;

import java.io.*;

public class login extends javax.swing.JFrame {

    String pFields[]={null, null, null};

    String dataf[]={null, null, null};

    String path =null;

    String status=null;

    public login() {

        initComponents();

    }

    @SuppressWarnings("unchecked")

    // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents

    private void initComponents() {

        user = new javax.swing.JTextField();

        pass = new javax.swing.JPasswordField();

        passS = new javax.swing.JLabel();
    }
}
```

```
signin = new javax.swing.JLabel();

userS = new javax.swing.JLabel();

windowBack = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

org.jdesktop.application.ResourceMap resourceMap =
org.jdesktop.application.Application.getInstance(molestart.mainM.class).getContext().getResourceMap(login.class);

setTitle(resourceMap.getString("Form.title")); // NOI18N

setMinimumSize(new java.awt.Dimension(599, 260));

setName("Form"); // NOI18N

setResizable(false);

getContentPane().setLayout(null);

user.setBackground(resourceMap.getColor("user.background")); // NOI18N

user.setForeground(resourceMap.getColor("user.foreground")); // NOI18N

user.setToolTipText(resourceMap.getString("user.toolTipText")); // NOI18N

user.setName("user"); // NOI18N

getContentPane().add(user);

user.setBounds(85, 27, 140, 20);

pass.setBackground(resourceMap.getColor("background")); // NOI18N

pass.setForeground(resourceMap.getColor("foreground")); // NOI18N

pass.setText(resourceMap.getString("text")); // NOI18N

pass.setToolTipText(resourceMap.getString("pass.toolTipText")); // NOI18N
```

```
pass.setName(""); // NOI18N
getContentPane().add(pass);
pass.setBounds(382, 27, 150, 20);

passS.setText(resourceMap.getString("passS.text")); // NOI18N
passS.setToolTipText(resourceMap.getString("passS.toolTipText")); // NOI18N
passS.setName("passS"); // NOI18N
getContentPane().add(passS);
passS.setBounds(465, 82, 130, 120);

signin.setIcon(resourceMap.getIcon("signin.icon")); // NOI18N
signin.setText(resourceMap.getString("signin.text")); // NOI18N
signin.setToolTipText(resourceMap.getString("signin.toolTipText")); // NOI18N
signin.setCursor(new java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));
signin.setName("signin"); // NOI18N
signin.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        signinMouseClicked(evt);
    }
});
getContentPane().add(signin);
signin.setBounds(60, 120, 180, 50);

userS.setText(resourceMap.getString("userS.text")); // NOI18N
```

```

userS.setToolTipText(resourceMap.getString("userS.toolTipText")); // NOI18N
userS.setName("userS"); // NOI18N
getContentPane().add(userS);
userS.setBounds(338, 82, 130, 120);

windowBack.setIcon(resourceMap.getIcon("windowBack.icon")); // NOI18N
windowBack.setText(resourceMap.getString("windowBack.text")); // NOI18N
windowBack.setMaximumSize(new java.awt.Dimension(599, 330));
windowBack.setMinimumSize(new java.awt.Dimension(599, 330));
windowBack.setName("windowBack"); // NOI18N
windowBack.setPreferredSize(new java.awt.Dimension(599, 250));
getContentPane().add(windowBack);
windowBack.setBounds(0, 0, 600, 230);

pack();
}// </editor-fold>//GEN-END:initComponents

```

```

private void signinMouseClicked(java.awt.event.MouseEvent evt) {//GEN-FIRST:event_signinMouseClicked
try{
if("1".equals(ValUser())){
if("1".equals(createFiles())){
File f3 = new File("config.ms");
f3.delete();
}
}
}

```

```

Process p1 = Runtime.getRuntime().exec("mCore.exe");

Process p = Runtime.getRuntime().exec("MOLE.exe");

dispose();

}

}

}catch(Exception e){

JOptionPane.showMessageDialog(null, "We Encountered a Problem. "+e.getMessage());

}

}//GEN-LAST:event_signinMouseClicked

public static void main(String args[]) {

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

 * For details see

http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

*/

try {

for (javax.swing.UIManager.LookAndFeelInfo info :

javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

```

```
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,  
null, ex);
```

```
    } catch (InstantiationException ex) {
```

```
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,  
null, ex);
```

```
    } catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,  
null, ex);
```

```
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE,  
null, ex);
```

```
}
```

```
//</editor-fold>
```

```
java.awt.EventQueue.invokeLater(new Runnable() {
```

```
    public void run() {
```

```
        new login().setVisible(true);
```

```
    }
```

```
});
```

```
}
```

```
public String ValUser(){
```

```
    path ="core/";
```

```
try{
    String un = user.getText();
    String passW = new String (pass.getPassword());
    URL url = new
    URL("http://mole.loomhost.com/Images_Settings/RegMe/uData?u="+un+"&p="+passW);
    URLConnection urlConnection = url.openConnection();
    HttpURLConnection connection = null;
    if(urlConnection instanceof HttpURLConnection){
        connection = (HttpURLConnection) urlConnection;
    }
    BufferedReader in = new BufferedReader(
    new InputStreamReader(connection.getInputStream()));
    String data = null;
    String current = null;
    ImageIcon u=null,p=null;
    String res1=null, res2=null;
    while((current = in.readLine()) != null){
        if(current.startsWith("U")){
            data += current;
        }
    }
    dataf=data.split("<br/>");
    pFields[0] = dataf[0].substring(8);
    pFields[1] = dataf[1].substring(4);
```

```

pFields[2] = dataf[2].substring(4);

in.close();

if(!("0".equals(pFields[0])) && pFields[1].matches(passW)){

    u = new ImageIcon(path+"okay.mi");

    p = new ImageIcon(path+"okay.mi");

    res1="Entered Username is Okay";

    res2="Entered Password is Okay";

    status ="1";

    data = null;

    URL url1 = new

URL("http://mole.loomhost.com/Images_Settings/RegMe/personalData?u="+un);

    URLConnection urlConnection2 = url1.openConnection();

    HttpURLConnection connection1 = null;

    if(urlConnection2 instanceof HttpURLConnection){

        connection1 = (HttpURLConnection) urlConnection2;

    }

    BufferedReader in1 = new BufferedReader(

    new InputStreamReader(connection1.getInputStream()));

    String dataf1[]={null, null, null, null, null};

    while((current = in1.readLine()) != null){

        if(current.startsWith("Status")){

            data = current;

        }

    }

}

```

```

dataf1=data.split("<br/>");

pFields[3]=dataf1[1].substring(4);

pFields[4]=dataf1[2].substring(4);

pFields[5]=dataf1[3].substring(4);

pFields[6]=dataf1[4].substring(6);

pFields[7]=dataf1[5].substring(4);

in1.close();

data = null;

URL url2 = new
URL("http://mole.loomhost.com/Images_Settings/RegMe/examData?u="+un);

URLConnection urlConnection3 = url2.openConnection();

HttpURLConnection connection2 = null;

if(urlConnection3 instanceof HttpURLConnection){

    connection2 = (HttpURLConnection) urlConnection3;

}

BufferedReader in2 = new BufferedReader(
new InputStreamReader(connection2.getInputStream()));

String dataf2[]={};

while((current = in2.readLine()) != null){

    if(current.startsWith("TP")){

        data = current;

    }

}

```

```

in2.close();

dataf2=data.split("<br/>");

File f3 = new File(path+"exams.ms");

PrintWriter examP = new PrintWriter("user/exams.ms", "UTF-8");

examP.write(dataf2[0]+"\n");

examP.append(dataf2[1]+"\n");

for(int i=2; i<dataf2.length;i++){

    if(dataf2[i].startsWith("Name")){
        examP.append(dataf2[i]+"\n");
        examP.append(dataf2[i+1]+"\n");
        examP.append(dataf2[i+2]+"\n");
        examP.append(dataf2[i+3]+"\n");
    }
}

examP.close();

}else{
    status = "0";
    if("0".equals(pFields[0])){
        u = new ImageIcon(path+"wrong.mi");
        res1="Entered Username is not Registered.";
        if("0".equals(pFields[1])){
            p = new ImageIcon(path+"wrong.mi");
            res2="A Password Cannot be Present for an Unregistered Account.";
        }
    }
}

```

```

}else{

    u = new ImageIcon(path+"okay.mi");

    res1="Entered Username is Okay";

    p = new ImageIcon(path+"wrong.mi");

    res2="Entered Password is Wrong, Please Enter the Correct Password./";

}

userS.setIcon(u);

passS.setIcon(p);

userS.setToolTipText(res1);

passS.setToolTipText(res2);

}catch(IOException e){

    status = "0";

    JOptionPane.showMessageDialog(null, "We Encountered a Problem. "+e.getMessage());

}

return status;

}

public String createFiles(){

try{

path ="user/";

File f1 = new File(path+"log.ms");

PrintWriter log = new PrintWriter(path+"log.ms", "UTF-8");

PrintWriter details = new PrintWriter(path+"details.ms", "UTF-8");

log.println("Username = "+pFields[0]);

```

```

log.println("Password = "+pFields[1]);
log.println("Email = "+pFields[2]);
log.close();
details.println("First = "+pFields[3]);
details.println("Last = "+pFields[4]);
details.println("Sex = "+pFields[5]);
details.println("School = "+pFields[6]);
details.println("DOB = "+pFields[7]);
details.close();
status = "1";
}catch(Exception e){
    JOptionPane.showMessageDialog(null, "We Encountered a Problem. "+e.getMessage());
    status = "0";
}
return status;
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JPasswordField pass;
private javax.swing.JLabel passS;
private javax.swing.JLabel signin;
private javax.swing.JTextField user;
private javax.swing.JLabel userS;
private javax.swing.JLabel windowBack;
// End of variables declaration//GEN-END:variables}

```

xii. MOLE Sender (MSender)

1. MSender.java

```
package msender;

import java.io.*;
import java.net.*;

import javax.swing.JOptionPane;

public class MSender {

    public static String path;

    public static void setD(String ExamN, String Mark, String Status){

        path ="user\\log.ms";

        File userL = new File(path);

        try{

            String dataf[]={};

            BufferedReader useri = new BufferedReader(new FileReader(userL));

            String user = useri.readLine().substring(11);

            useri.close();

            int Marks4DB[]={0,0};

            String query =
            "http://mole.loomhost.com/Images_Settings/RegMe/examS_R.php?u="+user+"&e="+ExamN;

            URL url = new URL(query);

            URLConnection urlConnection = url.openConnection();

            HttpURLConnection connection = null;
```

```

if(urlConnection instanceof HttpURLConnection){

    connection = (HttpURLConnection) urlConnection;

}

BufferedReader in = new BufferedReader(
    new InputStreamReader(connection.getInputStream()));

String data = null;

String current = null;

while((current = in.readLine()) != null){

    if(current.startsWith("CMark")){
        data = current;
    }
}

dataf=data.split("<br/>");

Marks4DB[0]=new Integer(dataf[0].substring(8));

Marks4DB[1]=new Integer(dataf[1].substring(8));

if(Marks4DB[0]==0 && Marks4DB[1]==0){

    query =
"http://mole.loomhost.com/Images_Settings/RegMe/examS_R.php?u="+user+"&e="+ExamN+
&l=1&cm="+Mark+"&lm=0&s="+Status;

}else{

    query =
"http://mole.loomhost.com/Images_Settings/RegMe/examS_R.php?u="+user+"&e="+ExamN+
&l=0&cm="+Mark+"&lm="+Marks4DB[0]&s="+Status;

}

dataSend(query);

}catch(Exception ex){

```

```

        JOptionPane.showMessageDialog(null, "We Encountered a Problem.
"+ex.getMessage());
    }

}

public static void dataSend(String a){

try{

    URL url1 = new URL(a);

    URLConnection urlConnection1 = url1.openConnection();

    HttpURLConnection connection1 = null;

    if(urlConnection1 instanceof HttpURLConnection){

        connection1 = (HttpURLConnection) urlConnection1;

    }

    BufferedReader in1 = new BufferedReader(new
InputStreamReader(connection1.getInputStream()));

}catch(Exception e){

    JOptionPane.showMessageDialog(null, "We Encountered a Problem. "+e.getMessage());

}

}

public static void main(String[] args) {

try {

path = "user\\examdone.ms";

File examl = new File(path);

BufferedReader exami = new BufferedReader(new FileReader(examl));

int count = Integer.parseInt(exami.readLine().substring(14));

while (count != 0) {

```

```
    setD(exami.readLine().substring(7), exami.readLine().substring(7),
exami.readLine().substring(9));

    count--;

}

JOptionPane.showMessageDialog(null, "Your Examination Progress Updated
Successfully");

exami.close();

exami.delete();

} catch (Exception ex) {

JOptionPane.showMessageDialog(null, "We Encountered a Problem. " + ex.getMessage());

}

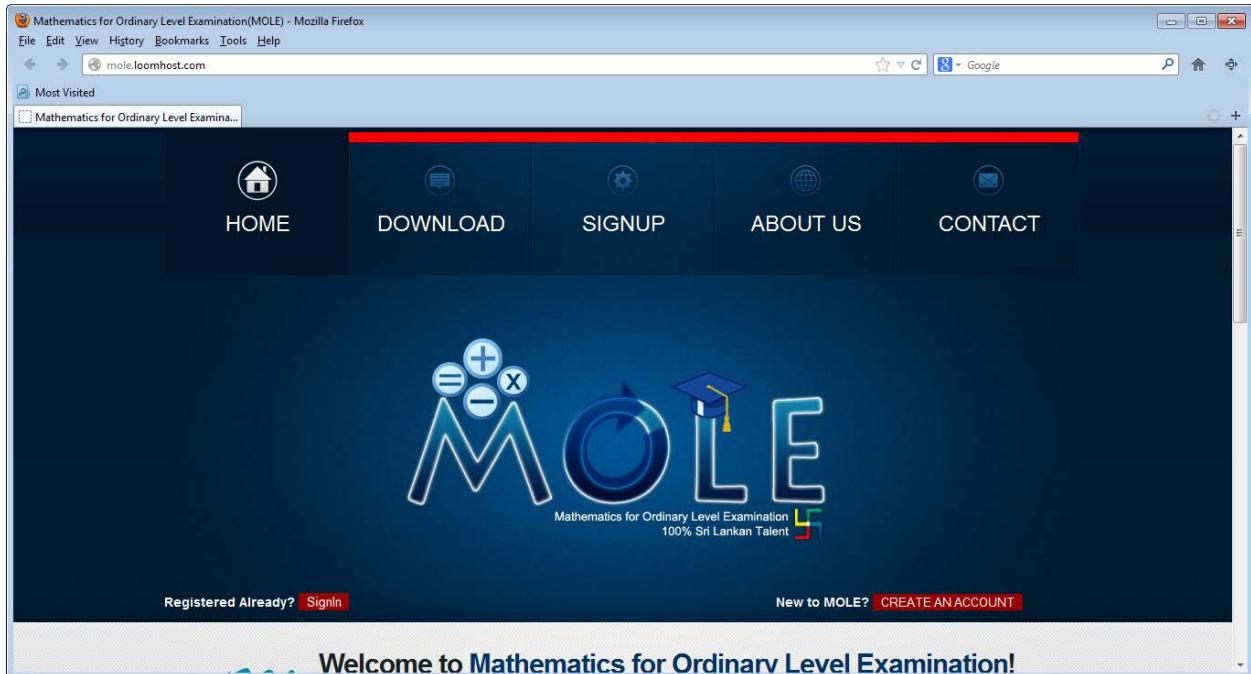
}

}
```

b) Website

Each page of the Website is shown in a screenshot obtained from the site: mole.loomhost.com, followed by its codings, and related files. The actual full names of the files are invisible to the user, for security reasons.

i. Home Page



1. index.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Mathematics for Ordinary Level Examination(MOLE)</title>
<meta charset="utf-8">
<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);
function MM_openBrWindow(theURL,winName,features) { //v2.0
    window.open(theURL,winName,features);
}
</script>
<style type="text/css">
.style10 {
    color: #FFFFFF;
    font-weight: bold;
}
.style13 {color: #003366}
.bodyC {
    height: auto;
    background-image: url(Images_Settings/bacm.jpg);
}
.style14 {color: #FFFFFF}
.style15 {
    color: #0066CC;
    background-image: url(Images_Settings/bacm1.jpg);
    padding: 0px 0px 0px 15px;
}
.style16 {
    color: #001C31;
    padding-left: 5px;
    background-image: url(Images_Settings/bacm.jpg);
    width: 455px;
}
.style17 {color: #B8DFE4}
#signIN {
    position:absolute;
    width:208px;
    height:28px;
    z-index:2;
    left: 165px;
    top: 508px;
    visibility: hidden;
}
.style23 {font-size: 13px}
```

```

.style24 {font-size: 11px}
.style25 {color: #99CC00}

```

```

</style>
</head>
<body id="page1">
<div class="body1">
    <div class="body2">
        <div class="main">
            <nav id="menu">
                <ul>
                    <li class="nav1" id="active"><a href="#You are Here">Home</a></li>
                    <li class="nav2"><a href="download">Download</a></li>
                    <li class="nav3"><a href="StudentSignup?Ustatus=0&Estatus=0">signup</a></li>
                        <li class="nav4"><a href="about">About us</a></li>
                        <li class="nav5"><a href="contact">Contact</a></li>
                </ul>
            </nav>
        </div>
        <div id="logged">
            <div align="right" class="style10">
                <div align="center"><span class="style25">Your are Signed In as</span>
                <?php include("Images_Settings/RegMe/userL.php");
if(isset($_SESSION['StudentM'])){$us = $_SESSION['StudentM']; echo "<a href='MyProfile'>$us</a>";}
?></div>
            </div>
            <div class="style10" id="signIN">
                Registered Already?
                <a href="signin"></a></div>
            </div>
        </div>
        <div class="style10" id="signUp_box">
            <form name="signUp" method="post" action="StudentSignup?Ustatus=0&Estatus=0">
                New to MOLE?
                <input name="signup" type="submit" class="signRed" id="signup" value="CREATE AN ACCOUNT" title="Register for a MOLE Account, Its Free">
            </form>
        </div>
        <div class="body3">
            <div class="body4"></div>
        </div>
        <div class="body5">
            <div class="body6">
                <div class="main">
                    <div class="wrapper">
                        <figure class="left"></figure>
                        <h2>Welcome to <span class="style5 style13">Mathematics for Ordinary Level Examination</span>!</h2>
                        <blockquote>
                            <blockquote>
                                <p>Mathematics for Ordinary Level Examination also known in short as <span class="style5"><strong>MOLE</strong></span>, is an electronic teacher that will

```

help students to learn the ways and means to pass the Ordinary Level Examination(O\L) Mathematics subject. And also never worry MOLE is and always will beFREE.

<p align="center">Think not maths as another war to fight but as a challenge worthy of taking.</p>

</blockquote>

</blockquote>

</div>

</div>

</div>

</div>

<div class="body7">

<div class="main">

<section id="content">

<div class="wrapper">

<article class="col2">

<div class="pad1">

<div class="picShot style15" id="picShot">

<div align="center"></div>

</div>

<h2>MOLE 1.0 Overview</h2>

<p class="pad_bot1">Mathematics for Ordinary Level Examination version 1.0 is the first release of MOLE and has included a wide range of special features not found on other educational softwares. Students can learn the steps and methods to easily solve a mathematical problem and also if not able to solve a problem on their own then they can use MOLE Calculators to solve that problem. Similarly many answers to common problems faced by students.</p>

<div align="right">Download MOLE </div>

</div>

</article>

<article class="col1 pad_left1">

<h2>Features</h2>

<ul class="list2">

Calculators

Examinations

Student Ratings

Interactive Lessons

<li class="bg_none">Ask Friends for Answers

</article>

</div>

</section>

</div>

</div>

<div class="body8">

<div class="body9">

<div class="main">

<footer>

<div class="col_1">

<h3 align="center" class="MRule">ONLY ONE RULE</h3>

<ul class="list3">

After Installing MOLE Please Pass it on to your colleagues

```

        or to your school <span class="free">freely</span>.</li>
    <li>
        <div align="center" class="greedQ">Never be Greedy or Selfish
Share with Others</div>
    </li>
</ul>
</div>
<div class="col_2 pad_left1">
    <h3 align="center">MOLE Team Members</h3>
    <span class="botL">MOLE Concept, Development all done by geniuses below,
</span>
    <div id="MTMI_panel">
        <div id="close_P"><a href="#close" onClick="showP()"></a></div>
        <div class="showPTC" id="fnameL1"></div>
        <div class="showPTC" id="fnameL2"></div>
        <div class="showPTC" id="eAddress"></div>
        <div class="showPTC" id="age"></div>
        <div class="showPTC" id="abtM"></div>
        <div id="Cil"></div>
    </div>
    <script type="text/javascript" >
        document.getElementById("MTMI_panel").style.display = 'none';
    </script>
<div class="wrapper">
    <ul class="list3 col_1">
        <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara
Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/>
Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
        <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga',
'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong>
<br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha
Samarasekara</strong></a></li>
            <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara',
'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong>
<br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
        </ul>
        <ul class="list3 col_1 pad_left1">
            <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake',
'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes
to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna
Aravinda</strong></a></li>
            <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya',
'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong>
<br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga
Weerasuriya</strong></a></li>
        </ul>
    </div>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics
for Ordinary Level Examination">First</a>

```

```
<p class="center style23">Copyright © 2013 <strong><a href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
<p class="center"><a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
<span class="style24">This work is licensed under a <a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
</div>
</footer>
</div>
</div>
</div><?php
if(isset($_SESSION['StudentM'])){
echo "<script
type='text/javascript'>document.getElementById('logged').style.visibility =
'veisible';</script>";
}else{
echo "<script
type='text/javascript'>document.getElementById('signIN').style.visibility =
'veisible';document.getElementById('signUp_box').style.visibility =
'veisible';</script>";
}
?>
<div class="botc"></div>
</body>
</html>
```

2. style.css

```
/* Copyright MOLE team, all rights reserved.*/
article, aside, audio, canvas, command, datalist, details, embed, figcaption, figure,
footer, header, hgroup, keygen, meter, nav, output, progress, section, source, video {
    display:block;
}
mark, rp, rt, ruby, summary, time {
    display:inline;
}
.left {
    float:left;
}
#MTMI_panel {
    position:absolute;
    width:420px;
    height:280px;
    z-index:1;
    left: 305px;
    top: -228px;
    background-color: #0099CC;
    background-image: url(abtMe.jpg);
    display: none;
}
.right {
    float:right;
}
.wrapper {
    width:100%;
    overflow:hidden;
}
.center {
    text-align:center;
}
body {
    background:#001527;
    border:0;
    font:14px Arial, Helvetica, sans-serif;
    color:#000000;
    line-height:20px;
}
.inner_copy, .inner_copy a {
    border:0;
    float:right;
    background:#fff;
    color:#f00;
    width:50%;
    line-height:10px;
    font-size:10px;
    margin:-220% 0 0 0;
    overflow:hidden;
    padding:0;
}
.css3 {
    border-radius:8px;
    -moz-border-radius:8px;
    -webkit-border-radius:8px;
```

```

        box-shadow:0 0 4px rgba(0, 0, 0, .4);
        -moz-box-shadow:0 0 4px rgba(0, 0, 0, .4);
        -webkit-box-shadow:0 0 4px rgba(0, 0, 0, .4);
        behavior:url(..../js/PIE.htc);
        position:relative;
    }
.main {
    margin:0 auto;
    width:1000px;
    position:relative;
}
.body1 {
    background:url(bg_top_repeat.gif) top repeat-x #001527;
}
.body2 {
    background:url(bg_top1.jpg) top center no-repeat;
}
.body3 {
    background:url(bg_top2_repeat.jpg) top repeat-x;
}
.body4 {
    background:url(bg_top2.jpg) top center no-repeat;
    height:379px;
}
.body5 {
    background:url(bg_top3_repeat.jpg) top center repeat-x;
    height: 200px;
}
.body6 {
    background:url(bg_top3.jpg) top center no-repeat;
    padding:28px 28px;
}
.body7 {
    background:#eeeeee;
    background-image: url(slide1.jpg);
}
.body8 {
    background:url(bg_bot_repeat.jpg) top repeat-x;
}
.body9 {
    background:url(bg_bot.jpg) top center no-repeat;
    height:230px;
}
a {
    color:#FFFFFF;
    text-decoration:underline;
    outline:none;
}
a:hover {
    text-decoration:none;
}
h1 {
    float:left;
    padding:21px 0 0 24px;
}
h2 {
    font-size:30px;
    color:#182125;
}

```

```

        line-height:1.2em;
        padding:26px 0 14px 0;
        letter-spacing:-1px;
    }
    h2 span {
        color:#000000;
    }
    h3 {
        font-size:20px;
        color:#fff;
        line-height:1.2em;
        padding:24px 0 40px 0;
    }
    p {
        padding-bottom:20px;
    }
    #logo {
        display:block;
        background:url(logo.gif) no-repeat;
        width:153px;
        height:60px;
        text-indent:-9999px;
    }
    header .right {
        padding-right:59px;
        width:500px;
    }
    #top_nav {
        padding:25px 0 0px 0;
        float:right;
        width:500px;
    }
    #top_nav li {
        float:right;
        padding:0 7px;
    }
    #top_nav li a {
        font-size:10px;
        color:#fff;
        text-transform:uppercase;
        text-decoration:none;
    }
    #top_nav li a:hover {
        text-decoration:underline;
    }
    #search {
        background:url(search.jpg) no-repeat;
        width:191px;
        height:26px;
        float:right;
        margin-top:3px;
    }
    #search .submit {
        float:right;
        background:none;
        height:26px;
        width:28px;
        cursor:pointer;
    }

```

```

}

#search .input {
    float:right;
    width:153px;
    height:16px;
    padding:5px 0 5px 10px;
    font:14px Arial, Helvetica, sans-serif;
    color:#000;
    background:none;
}
#menu {
    background:url(menu_border.gif) top left no-repeat;
    margin-top:5px;
}
#menu ul {
    background:url(menu_border.gif) top right no-repeat;
    width:100%;
    overflow:hidden;
}
#menu li {
    float:left;
    padding-left:2px;
}
#menu li a {
    display:block;
    height:66px;
    width:198px;
    font-size:24px;
    padding-top:90px;
    text-align:center;
    text-decoration:none;
    text-transform:uppercase;
}
#menu li a:hover, #menu #menu_active a {
}
.nav1 {
    background:url(menu1.gif) center 35px no-repeat;
}
.nav2 {
    background:url(menu2.gif) center 35px no-repeat;
}
.nav3 {
    background:url(menu3.gif) center 35px no-repeat;
}
.nav4 {
    background:url(menu4.gif) center 35px no-repeat;
}
.nav5 {
    background:url(menu5.gif) center 35px no-repeat;
}
.nav1:hover, .nav1#active {
    background:url(menu1_active.gif) center 31px no-repeat #001527;
}
.nav2:hover, .nav2#active {
    background:url(menu2_active.gif) center 31px no-repeat #001527;
}
.nav3:hover, .nav3#active {
    background:url(menu3_active.gif) center 31px no-repeat #001527;
}

```

```

}

.nav4:hover, .nav4#active {
    background:url(menu4_active.gif) center 31px no-repeat #001527;
}
.nav5:hover, .nav5#active {
    background:url(menu5_active.gif) center 31px no-repeat #001527;
}
.slogan {
    background:url(text.gif) center 108px no-repeat;
    height:141px;
    overflow:hidden;
    position:relative;
    padding-top:108px;
}
.slogan a {
    margin-top:64px;
}
#slider {
    height:141px;
    position:absolute !important;
    top:0;
    width:981px;
    left:82px;
    top:108px;
}
.nivoSlider {
    position:absolute;
}
.nivoSlider img {
    top:0px;
    left:0px;
}
.nivoSlider a.nivo-imageLink {
    position:absolute;
    top:0px;
    left:0px;
    width:100%;
    height:100%;
    border:0;
    padding:0;
    margin:0;
    z-index:60;
    display:none;
}
.nivo-slice {
    display:block;
    position:absolute;
    z-index:50;
    height:100%;
}
.nivo-directionNav a {
    position:absolute;
    margin-top:63px;
    z-index:99;
    cursor:pointer;
    text-indent:-9999px;
    width:21px;
    height:33px;
}

```

```

}
.nivo-prevNav {
    left:-22px;
    display:block;
    background:url(marker_left.jpg) no-repeat;
}
.nivo-nextNav {
    right:123px;
    background:url(marker_right.jpg) no-repeat;
}
.nivo-prevNav:hover {
    background:url(marker_left_active.jpg) no-repeat;
}
.nivo-nextNav:hover {
    background:url(marker_right_active.jpg) no-repeat;
}
#content {
    width:100%;
    overflow:hidden;
    padding:10px 0 10px 53px;
}
.body6 figure {
    padding-left:58px;
}
#page2 .body6 figure {
    padding-left:53px;
}
#page2 #content, #page3 #content, #page4 #content, #page5 #content {
    padding-top:0;
}
#page3 #content {
    padding-bottom:37px;
}
#page2 .col2 figure {
    margin-right:10px;
}
#page4 .body6 {
    padding-bottom:25px;
}
#page4 .marg_bot1 {
    margin-bottom:14px;
}
#page4 #content {
    padding-bottom:44px;
}
.body6 h2 {
    padding:0 0 14px 0;
    margin-top:-1px;
    letter-spacing:-1px;
    float:left;
    width:820px;
}
.pad_left1 {
    padding-left:33px;
}
.pad1 {
    padding:0 5px;
}

```

```

.pad_bot1 {
    padding-bottom:10px;
}
.pad_bot2 {
    padding-bottom:15px;
}
.marg_bot1 {
    margin-bottom:20px;
}
.box1 {
    background:url(box_repeat.gif) center repeat-y;
}
.box1_bot {
    background:url(box_bot.gif) center bottom no-repeat;
}
.box1_top {
    background:url(box_top.jpg) center top no-repeat;
    width:100%;
}
.box1 .pad {
    padding:0 26px;
    padding-bottom:23px;
}
.box1 h2 {
    font-size:24px;
    line-height:1.2em;
    color:#fff;
    padding:10px 0 22px 0;
}
.box1 h2.center {
    font-size:30px;
    line-height:1.2em;
    padding:4px 0 26px 0;
    letter-spacing:-1px;
}
.box1 .button {
    background:url(button2_bg.gif) top repeat-x;
}
.box1 .button span {
    background:url(button2_left.gif) top left no-repeat;
}
.box1 .button span span {
    background:url(button2_right.gif) top right no-repeat;
}
.box2 {
    background:url(box2_repeat.gif) left repeat-y;
    margin-bottom:11px;
}
.box2_top {
    background:url(box2_top.gif) left top no-repeat;
}
.box2_bot {
    background:url(box2_bot.gif) left bottom no-repeat;
    width:100%;
}
.box2 .pad {
    padding:15px 25px 13px;
}

```

```

.box2 figure {
    margin-right:10px;
}
.box2 a {
    display:block;
    margin-bottom:5px;
    text-decoration:none;
    margin-top:-2px;
}
.box2 a:hover {
    text-decoration:underline;
}
.box2 .cols {
    width:490px;
}
.button {
    background:url(button1_bg.gif) top repeat-x;
    display:inline-block;
    font-size:20px;
    color:#363636;
    line-height:34px;
    text-decoration:none;
}
.button span {
    display:block;
    background-color: #003366;
    background-image: url(bacm1.jpg);
}
.button span span {
    padding:0 40px;
    background:url(button1_right.gif) top right no-repeat;
    height:39px;
}
.button:hover {
    color:#990000;
}
.font1 {
    font-size:12px;
    display:block;
    padding-bottom:5px;
    margin-top:-2px;
}
.line1 {
    background:url(line_ver1.gif) 285px 0 repeat-y;
}
.list1 li {
    line-height:30px;
}
.list1 li a {
    padding-left:25px;
    background:url(marker_1.gif) 0 8px no-repeat;
    display:inline-block;
}
.list2 {
    margin-top:1px;
    padding-bottom:24px;
}
.list2 li {

```

```

        line-height:37px;
        background:url(line_hor1.gif) bottom repeat-x;
    }
.list2 .bg_none {
    background:none;
}
.list2 li a {
    font-size:18px;
    color:#000000;
    text-decoration:none;
}
.list2 li a:hover {
    color:#000066;
}
.list2 li img {
    margin-right:10px;
}
.list3 li {
    line-height:25px;
}
.list3 li a {
    text-decoration:none;
    padding-left:14px;
    background:url(marker_2.gif) 0 5px no-repeat;
}
.list3 li a:hover {
    text-decoration:underline;
}
.col_1 {
    width:190px;
    float:left;
}
.col_2 {
    width:413px;
    float:left;
}
.col_3 {
    width:230px;
    float:left;
    padding-left:8px;
}
#footer_logo {
    display:block;
    margin:15px 0 36px 64px;
    background:url(footer_logo.gif) no-repeat;
    width:98px;
    height:39px;
    text-indent:-9999px;
}
#RegMe {
    margin-top:-4px;
    line-height:26px;
}
#RegMe strong {
    float:left;
    width:130px;
    font-weight:normal;
}

```

```

#RegMe .wrapper {
    min-height:30px;
}
#RegMe .bg {
    background:url(input2.png) repeat;
    float:left;
}
#RegMe .textarea_box {
    min-height:260px;
}
#RegMe .textarea_box .bg {
    background:url(textarea.gif) no-repeat;
    float:left;
}
#RegMe a span span {
    padding:0;
}
#RegMe a {
    margin-right:20px;
    float:right;
    width:110px;
    text-align:center;
}
#RegMe .input {
    width:277px;
    height:17px;
    background:none;
    padding:6px 10px;
    color:#000;
    font:14px Arial, Helvetica, sans-serif;
}
#RegMe textarea {
    overflow:auto;
    width:464px;
    height:228px;
    background:none;
    padding:6px 10px;
    color:#000;
    font:14px Arial, Helvetica, sans-serif;
    margin:0;
}
#sign_up {
    width:100%;
    height:29px;
    overflow:hidden;
    padding-top:7px;
}
#sign_up .input {
    float:left;
    background:url(input.gif) no-repeat;
    width:120px;
    height:17px;
    padding:6px 10px;
    font:14px Arial, Helvetica, sans-serif;
    color:#000;
    margin-right:7px;
}
#sign_up a {

```

```

font-size:16px;
float:left;
background:url(sign_up.gif) no-repeat;
width:77px;
text-align:center;
line-height:24px;
height:29px;
color:#363636;
text-decoration:none;
}
#sign_up a:hover {
    color:#006abb;
}
#sign_up {
}
footer {
    padding:0 0 0 60px;
    color:#fff;
}
footer a {
    color:#FFFFFF;
}
footer p {
    margin:0;
    padding:0 0 15px 0;
}
footer p.center a {
    color:#fff;
    text-decoration:none;
}
.botc {
    font-size: 9px;
    height: 5px;
    background-color: #FF0000;
}
#MTMI_panel {
    position:absolute;
    width:420px;
    height:280px;
    z-index:1;
    left: 301px;
    top: -198px;
    background-color: #0099CC;
    background-image: url(abtMe.jpg);
    display: none;
}
#proI_Panel {
    position:absolute;
    width:115px;
    height:106px;
    z-index:1;
    background-color: #9966CC;
}
#close_P {
    position:absolute;
    width:15px;
    height:16px;
    z-index:1;
}

```

```

    left: 402px;
    top: 1px;
    background-color: #02DFF1;
}
#fnameL1 {
    position:absolute;
    width:155px;
    height:21px;
    z-index:2;
    left: 261px;
    top: 19px;
}
.showPTC {color: #000000}
#fnameL2 {
    position:absolute;
    width:219px;
    height:21px;
    z-index:3;
    left: 194px;
    top: 54px;
}
#eAddress {
    position:absolute;
    width:184px;
    height:21px;
    z-index:4;
    left: 233px;
    top: 93px;
}
#age {
    position:absolute;
    width:24px;
    height:21px;
    z-index:5;
    left: 223px;
    top: 132px;
}
#abtM {
    position:absolute;
    width:391px;
    height:69px;
    z-index:6;
    left: 15px;
    top: 205px;
}
#Cil {
    position:absolute;
    width:181px;
    height:152px;
    z-index:7;
    left: 5px;
    top: 18px;
}
.Mquote {    color: #990000;
    font-weight: bold;
}
.greedQ {
    color: #FFCC00;
}

```

```

        font-weight: bold;
        font-style: italic;
    }
.botL {
    color: #FFFFFF;
    font-style: italic;
}
.MRule {color: #FF0000}
.free {
    color: #0066FF;
    font-weight: bold;
}
#signUp_box {
    position:absolute;
    width:319px;
    height:20px;
    z-index:1;
    left: 834px;
    top: 508px;
    visibility: hidden;
}
.signRed {
    color: #FFFFFF;
    font-style: normal;
    background-color: #990000;
}
.Tnc {
    color: #990000;
    font-style: italic;
    font-size: 18px;
}
.termsC {font-size: 18px}
#abtMM {
    position:absolute;
    width:500px;
    height:430px;
    z-index:1;
    left: 55px;
    top: 110px;
    background-color: #001527;
}
#signIN {
    position:absolute;
    width:208px;
    height:28px;
    z-index:2;
    left: 165px;
    top: 508px;
}
#logged {
    position:absolute;
    width:390px;
    height:31px;
    z-index:3;
    left: 157px;
    top: 506px;
    visibility: hidden;
}

```

3. reset.css

```
a, abbr, acronym, address, applet, article, aside, audio, b, blockquote, big, body,
center, canvas, caption, cite, code, command, datalist, dd, del, details, dfn, dl, div,
dt, em, embed, fieldset, figcaption, figure, font, footer, form, h1, h2, h3, h4, h5, h6,
header, hgroup, html, i, iframe, img, ins, kbd, keygen, label, legend, li, meter, nav,
object, ol, output, p, pre, progress, q, s, samp, section, small, span, source, strike,
strong, sub, sup, table, tbody, tfoot, thead, th, tr, tdvideo, tt, u, ul, var {
    background: transparent;
    border: 0 none;
    font-size: 100%;
    margin: 0;
    padding: 0;
    border: 0;
    outline: 0;
}
ol, ul {
    list-style: none;
}
blockquote, q {
    quotes: none;
}
table, table td {
    padding: 0;
    border: none;
    border-collapse: collapse;
    margin: 0px 0px 0px 30px;
    background-color: #0066CC;
    background-image: url(bacm.jpg);
}
img {
    vertical-align: top;
}
embed {
    vertical-align: top;
}
* {
    border: none;
    background-color: #000000;
}
```

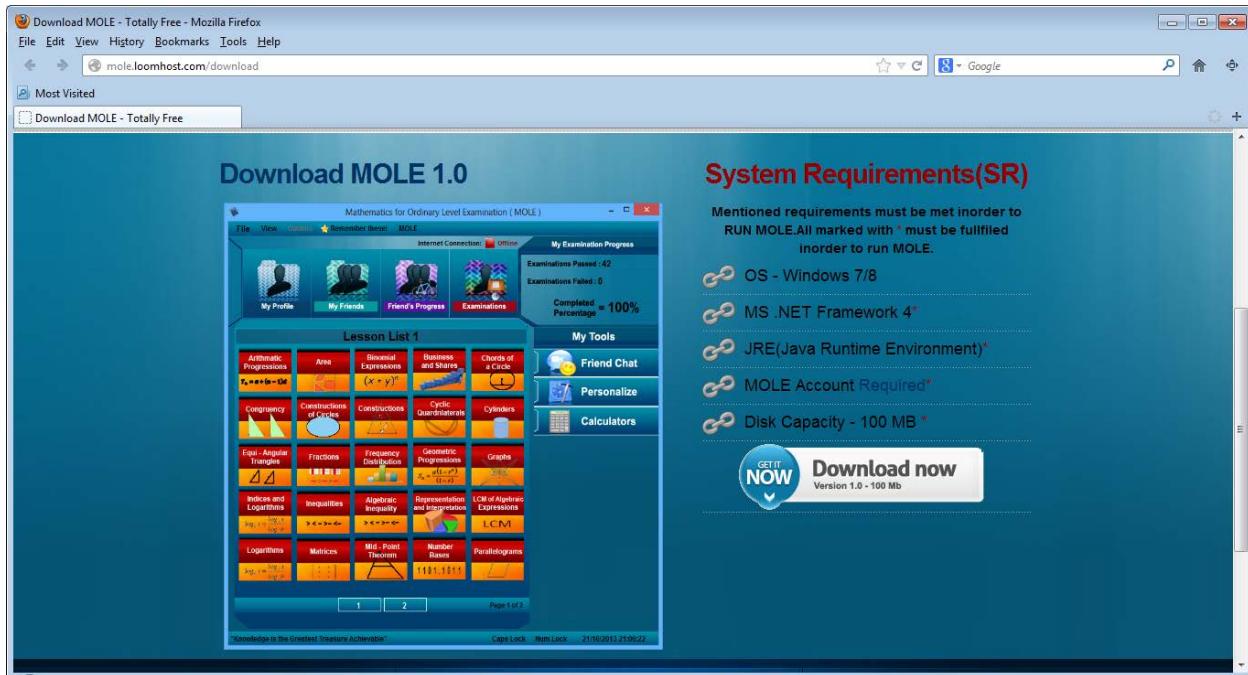
4. mainstyle.css

```
#logopane {
    width:100%;
    height:328px;
    margin: -10px 0px 0px 0px;
}
    background-image: url(bacm.jpg);
}
#logo {
    width:800px;
    height:328px;
    margin: -10px auto 0px auto;
    background-image: url(molehead.png);
}
body {
    background-color: #333333;
}
#bodyC {
    width:100%;
    height:600px;
    background-color: #FFFFFF;
    margin: 2px auto 0px auto;
}
#seperator {
    width:100%;
    height:20px;
    background-color: #0066FF;
}
```

5. layout.css

```
.col1, .col2, .col3, .cols {  
    float:left;  
}  
.col1 {  
    width:360px;  
}  
.col2 {  
    width:500px;  
}  
#page2 .cols {  
    width:525px;  
    padding-bottom:2px;  
}
```

ii. Download MOLE



1. download.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Download MOLE - Totally Free</title>
<meta charset="utf-8">

<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript" src="Images_Settings/RegMe/mainControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);function
valme(){var fieldsK = new Boolean(true);if(document.RegMe.name.value == "")fieldsK =
false;if(document.RegMe.email.value == "")fieldsK =
false;if(document.RegMe.reason.value == "")fieldsK =
false;if(document.RegMe.msg.value == "")fieldsK = false;if(fieldsK ==
false)alert("Enter all the required information");return fieldsK;}
</script>
<style type="text/css">
.style5 {color: #005788}
.style11 {
    color: #003366
}
.style12 {color: #333333}

```

```

.style13 {color: #990000}
.style23 {font-size: 13px}
.style24 {font-size: 11px}
#dLog {
    position:absolute;
    width:200px;
    height:51px;
    z-index:1;
    left: 346px;
    top: 11px;
    color: #000000;
    font-weight: bold;
    visibility: hidden;
}
</style>
</head>
<body id="page5">
<div class="body1">
    <div class="body2">
        <div class="main">
            <nav id="menu">
                <ul>
                    <li class="nav1"><a href="http://mole.loomhost.com">Home</a></li>
                    <li class="nav2" id="active"><a href="#You are Here">Download</a></li>
                    <li class="nav3"><a href="StudentSignup?Ustatus=0&Estatus=0">Signup</a></li>
                        <li class="nav4"><a href="about">About us</a></li>
                        <li class="nav5"><a href="contact">Contact</a></li>
                </ul>
            </nav>
        </div>
    </div>
<div class="body5">
    <div class="body6">
        <div class="main">
            <div class="wrapper">
                <figure class="left"></figure>
                <h2>Welcome to <span class="style5">Mathematics for Ordinary Level Examination</span> !</h2>
                <blockquote>
                    <blockquote>
                        <p>Mathematics for Ordinary Level Examination also known in short as <span class="showPTC"><strong>MOLE</strong></span>, is an electronic teacher that will help students to learn the ways and means to pass the Ordinary Level Examination(O\L) Mathematics subject. And also never worry MOLE is and always will be<span class="style5"> FREE</span>. </p>
                        <p align="center"><span class="Mquote">“Think not maths as another war to fight but as a challenge worthy of taking.”</span></p>
                    </blockquote>
                </blockquote>
            </div>
        </div>
    </div>
</div>

```

```

</div>
<div class="body7">
  <div class="main">
    <section id="content">
      <div class="wrapper">
        <article class="col2">
          <div class="pad1">
            <h2 align="left" class="style11">Download MOLE 1.0</h2>

            <div id="dLog">
              <div align="center">Your are signed in as </div>
              <div align="center">
                <?php include("Images_Settings/RegMe/userL.php");
if(isset($_SESSION['StudentM'])){$us = $_SESSION['StudentM']; echo "<a
href='MyProfile' style='color:black;'>$us</a>"; } ?>
              </div>
            </div>
            <div align="center"></div>
          </div>
        </article>
        <article class="col1 pad_left1">
          <h2 align="center"><span class="style13">System</span> <span
class="style13">Requirements(SR)</span></h2>
          <h5 align="center" >Mentioned requirements must be met inorder to RUN
MOLE.All marked with <span class="style13">*</span> must be fullfilled inorder to run
MOLE.</h5>
          <ul class="list2">
            <li class="style12"><span class="termsC showPTC">OS - Windows
7/8</span></li>
            <li class="termsC showPTC"><a href="http://www.microsoft.com/en-
us/download/details.aspx?id=24872"></a>MS .NET Framework 4<span
class="style13">*</span></li>
            <li class="termsC showPTC"><a
href="http://www.java.com/en/download/index.jsp"></a>JRE(Java Runtime Environment)<span class="style13">*</span></li>
            <li class="termsC showPTC"><a
href="StudentSignup.php?Ustatus=0&Estatus=0"></a><span
class="style11"><span class="showPTC">MOLE Account </span>Required<span
class="style13">*</span></li>
            <li class="termsC showPTC">Disk
Capacity - 100 MB <span class="style13">*</span></li>
            <li class="termsC showPTC">
              <div align="center"><a href="download?downC=1"></a></div>
            </li>
          </ul>
        </article>
      </div>

```

```

        </section>
    </div>
</div>
<div class="body8">
    <div class="body9">
        <div class="main">
            <footer>
                <div class="col_1">
                    <h3 align="center" class="MRule">ONLY ONE RULE</h3>
                    <ul class="list3">
                        <li>After Installing MOLE Please Pass it on to your colleagues or to your school <span class="free">freely</span>.</li>
                        <li>
                            <div align="center" class="greedQ">&#8220;Never be Greedy or Selfish Share with Others&#8221;</div>
                        </li>
                    </ul>
                </div>
                <div class="col_2 pad_left1">
                    <h3 align="center">MOLE Team Members</h3>
                    <span class="botL">MOLE Concept, Development all done by geniuses below,</span>
                    <div id="MTMI_panel">
                        <div id="close_P"><a href="#close" onClick="showP()"></a></div>
                        <div class="showPTC" id="fnameL1"></div>
                        <div class="showPTC" id="fnameL2"></div>
                        <div class="showPTC" id="eAddress"></div>
                        <div class="showPTC" id="age"></div>
                        <div class="showPTC" id="abtM"></div>
                        <div id="Cil"></div>
                    </div>
                    <script type="text/javascript" >
                        document.getElementById("MTMI_panel").style.display = 'none';
                    </script>
                    <div class="wrapper">
                        <ul class="list3 col_1">
                            <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/> Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
                            <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga', 'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong> <br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha Samarasekara</strong></a></li>
                            <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara', 'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong> <br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
                        </ul>
                        <ul class="list3 col_1 pad_left1">
                            <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake', 'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes

```

```

to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna
Aravinda</strong></a></li>
    <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya',
'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong>
<br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga
Weerasuriya</strong></a></li>
</ul>
</div>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics
for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <strong><a
href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
    <p class="center"><a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons
Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
    </div>
</div>
</div>
<div class="botc"></div>
<?php
if(isset($_SESSION['StudentM'])){
    if(isset($_GET["downC"])){
        echo "<script type='text/javascript'>alert('MOLE Software is still
Underconstruction but will be soon available');</script>";
        //include("Images_Settings/RegMe/ConnectMe2.php");
//        $query = mysql_query("select total from downcount");
//        $tot = mysql_num_rows($query);
//        $tot +=1;
//        $query = mysql_query("INSERT INTO downcount SET total='$tot'");
//    }
    echo "<script
type='text/javascript'>document.getElementById('dLog').style.visibility =
'veisible';</script>";
} else{
    echo "<script type='text/javascript'>alert('You must Signin through the
Homepage, inorder to download MOLE');</script>";
}
?>
</body>
</html>

```

iii. MOLE Register

The screenshot shows a registration form titled "Register for MOLE". The form includes fields for First Name, Last Name, Date of Birth (format YYYY/MM/DD), School Name, Gender (Male/Female), Username, Password, Confirm Password, Email, and Confirm Email. To the right of the form is a section titled "Terms and Conditions of Mathematics for Ordinary Level Examination(MOLE)" with five rules listed. Below the rules is a note: "Register only if you accept all the terms and conditions of the MOLE team". At the bottom of the page, there are links for "ONLY ONE RULE", "MOLE Team Members", and the "MOLE" logo. A footer at the bottom provides copyright information.

1. StudentSignup.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Signup for a Free MOLE Account</title>
<meta charset="utf-8">

<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript" src="Images_Settings/RegMe/mainControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);
</script>
<style type="text/css">
.style3 {
    font-size: 16px;
    font-weight: bold;
}
.style5 {color: #005788}
.style11 {
    color: #003366
}
.style12 {color: #333333}

```

```

.style23 {font-size: 13px}
.style24 {font-size: 11px}

```

```

</style>
</head>
<body id="page5">
<div class="body1">
    <div class="body2">
        <div class="main">
            <nav id="menu">
                <ul>
                    <li class="nav1"><a href="http://mole.loomhost.com">Home</a></li>
                    <li class="nav2"><a href="download">Download</a></li>
                    <li class="nav3" id="active"><a href="#You are Here">Signup</a></li>
                    <li class="nav4"><a href="about">About us</a></li>
                    <li class="nav5"><a href="contact">Contact</a></li>
                </ul>
            </nav>
        </div>
    </div>
</div>
<div class="body5">
    <div class="body6">
        <div class="main">
            <div class="wrapper">
                <figure class="left"></figure>
                <h2>Welcome to <span class="style5">Mathematics for Ordinary Level Examination</span> !</h2>
                <blockquote>
                    <blockquote>
                        <p>Mathematics for Ordinary Level Examination also known in short as <span class="showPTC"><strong>MOLE</strong></span>, is an electronic teacher that will help students to learn the ways and means to pass the Ordinary Level Examination(O\L) Mathematics subject. And also never worry MOLE is and always will be<span class="style5"> FREE</span>. </p>
                        <p align="center"><span class="Mquote">“&#8220;Think not maths as another war to fight but as a challenge worthy of taking.&#8221;</span></p>
                    </blockquote>
                    </blockquote>
                </div>
            </div>
        </div>
    </div>
<div class="body7">
    <div class="main">
        <section id="content">
            <div class="wrapper">
                <article class="col2">
                    <div class="pad1">
                        <h2 class="style11">Register for MOLE</h2>
                        <form action="userReg.php" method="get" name="RegMe" id="RegMe" onSubmit="return(Validate())">
                            <div>
                                <div class="wrapper"> <strong>First Name:</strong>
                                <div class="bg">

```

```

        <input id="fname" type="text" name="fname" maxlength="30"
class="input"/>
</div>
        </div>
        <div class="wrapper"> <strong>Last Name:</strong>
        <div class="bg">
            <input id="lname" type="text" name="lname" maxlength="30"
class="input"/>
            <img alt="" name="Status" width="33" height="31" id="ls" />
</div>
        </div>
        <div class="wrapper"> <strong>Date of Birth:</strong>
        <div class="bg">
            <input name="dob" type="text" class="input" id="dob"
value="YYYY/MM/DD" maxlength="10"/>
            <img alt="" name="Status" width="33" height="31" id="ds" />
</div>
        </div>
        <div class="wrapper"> <strong>School Name:</strong>
        <div class="bg">
            <input id="sname" type="text" name="sname" maxlength="60"
class="input"/>
            <img alt="" name="Status" width="33" height="31" id="ss" />
</div>
        </div>
        <div class="wrapper"> <strong>Select Your Gender:</strong>
        <div class="bg">
            <input type="radio" name="sex" value="m" checked/>Male
            <input type="radio" name="sex" value="f"
unchecked/>Female
            </div>
        </div>
        <hr/>
        <div class="wrapper"> <strong>Username:</strong>
        <div class="bg">
            <input id="uname" type="text" name="uname" maxlength="65"
class="input"/>
            <img alt="" name="Status" width="33" height="31" id="us" />
</div>
        </div>

        <div class="wrapper"> <strong>Password:</strong>
        <div class="bg">
            <input id="pass" type="password" name="pass" maxlength="25"
class="input"/>
            <img alt="" name="Status" width="33" height="31" id="ps" />
</div>
        </div>
        <div class="wrapper"> <strong>Confirm Password:</strong>
        <div class="bg">
            <input id="passC" type="password" maxlength="25" class="input"/>
            <img alt="" name="Status" width="33" height="31" id="cps" />
</div>
        </div>
        <div class="wrapper"> <strong>Email:</strong>

```

```

        <div class="bg">
            <input id="email" type="text" name="email" maxlength="65"
class="input"/>
            <img alt="" name="Status" width="33" height="31" id="es" />
        </div>
    </div>
    <div class="wrapper"> <strong>Confirm Email:</strong>
        <div class="bg">
            <input type="text" id="emailC" maxlength="65" class="input"/>
            <img alt="" id="ces" width="33" height="31" name="Status" />
        </div>
        <div align="right"><br/>
            <input name="CLEAR" type="reset" class="button" id="CLEAR"
onClick="ResetI()" value="Clear Fields"/>
            <input name="REG" type="submit" class="button" id="REG"
value="Register"/>
        </div>
    </div>
</form>
</div>
</article>
<article class="col1 pad_left1">
    <h2>Terms and Conditions of</h2>
    <h5 class="style13">Mathematics for Ordinary Level Examination(MOLE)</h5>
    <ul class="list2">
        <li class="style12"><span class="termsC showPTC">For Non-
Commercial Use Only</span></li>
        <li class="termsC showPTC">Manipulation
of Any Kind is Prohibited</li>
        <li class="termsC showPTC">After Using,
Share with Others</li>
        <li class="termsC showPTC">A Username
Cannot be Exchanged</li>
        <li class="termsC showPTC">Using a
Resources Requires Consent</li>
    <li class="style12">
        <div align="center" class="Tnc">Register only if you accept all the
terms and conditions of the MOLE team.</div>
    </li>
    </ul>
</article>
</div>
</section>
</div>
</div>
<div class="body8">
    <div class="body9">
        <div class="main">

```

```

<footer>
    <div class="col_1">
        <h3 align="center" class="MRule">ONLY ONE RULE</h3>
        <ul class="list3">
            <li>After Installing MOLE Please Pass it on to your colleagues or to your school <span class="free">freely</span>.</li>
            <li>
                <div align="center" class="greedQ">&#8220;Never be Greedy or Selfish Share with Others&#8221;</div>
            </li>
        </ul>
    </div>
    <div class="col_2 pad_left1">
        <h3 align="center">MOLE Team Members</h3>
        <span class="botL">MOLE Concept,Development all done by geniuses below,</span>
        <div id="MTMI_panel">
            <div id="close_P"><a href="#close" onClick="showP()"></a></div>
            <div class="showPTC" id="fnameL1"></div>
            <div class="showPTC" id="fnameL2"></div>
            <div class="showPTC" id="eAddress"></div>
            <div class="showPTC" id="age"></div>
            <div class="showPTC" id="abtM"></div>
            <div id="Cil"></div>
        </div>
        <script type="text/javascript" >
            document.getElementById("MTMI_panel").style.display = 'none';
        </script>
        <div class="wrapper">
            <ul class="list3 col_1">
                <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/> Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
                    <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga', 'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong> <br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha Samarasekara</strong></a></li>
                    <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara', 'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong> <br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
                </ul>
                <ul class="list3 col_1 pad_left1">
                    <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake', 'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna Aravinda</strong></a></li>
                    <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya', 'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong> <br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga Weerasuriya</strong></a></li>
                </ul>
            </div>
        </div>
    </div>

```

```

        </ul>
    </div>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <strong><a href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
    <p class="center"><a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
    </div>
    </div>
</div>
<div class="botc"></div>
<?php
$Ustatus=$_GET["Ustatus"];
$Estatus=$_GET["Estatus"];
if ($Ustatus == 1021) { ?>
    <script type="text/javascript">SetStatusM("us", "Images_Settings/no.png", "Entered Username is Already Registered, Please Enter a Different Username");</script>
<?php } if ($Estatus == 1993){ ?>
<script type="text/javascript">SetStatusM("es", "Images_Settings/no.png", "Entered Email is Already Registered, Please Enter a Different Email");</script> <?php } ?>
</body>
</html>

```

2. userReg.php

```
<html>
<head>
</head>
<body>
<?php include("Images_Settings/RegMe/ConnectMe2.php");

$query = mysql_query("select username from userinfo where username =
'$_POST[uname]'");
$usName = mysql_num_rows($query);
$query = mysql_query("select email from userinfo where email = '$_POST[email]'");
$emailName = mysql_num_rows($query);
$postK[1]= array(0,0);

if($emailName == 0){
    $postK[0] = 0;
    $postK[1] = 0;
}else{
    $postK[0] = 1993;
}
if($usName == 0){
    $postK[0] = 0;
    $postK[1] = 0;
}else{
    $postK[1] = 1021;
}

if ($postK[0] == 0 && $postK[1] == 0){
    $fname = strip_tags($_GET["fname"]);
    $lname = strip_tags($_GET["lname"]);
    $sname = strip_tags($_GET["sname"]);
    $dob = strip_tags($_GET["dob"]);
    $uname = strip_tags($_GET["uname"]);
    $pass = strip_tags($_GET["pass"]);
    $email= strip_tags(urldecode($_GET["email"]));
    $gen = strip_tags($_GET["sex"]);
    $confirmC =md5(uniqid(rand()));
    echo $email;
    $query = "INSERT INTO temps VALUES('$confirmC','$uname', '$pass',
'$email', '$fname', '$lname', '$gen', '$sname', '$dob')";
    $Equery =mysql_query($query) or die(mysql_error()."Unable to connect to
the Database.");
    if($Equery){
        $headers = "From: no-reply@mole.loomhost.com\n";
        $headers .= "Reply-To: no-reply@mole.loomhost.com";
        $msg ="Congratulations your account details were approved by the
MOLE team as legitimate.\r\n";
        $msg.="Click on the link below to activate your approved
account.\r\n";
        $msg.="http://mole.loomhost.com/confirm?Code=$confirmC";
        $ms=mail($email,"Activate Your MOLE Account", $msg, $headers);
        if($ms){
            header("Location:success");
        }else{
```

```
echo "An Error Occured while sending the email, Your Email  
wasn't sent.";  
    }  
}  
}else{  
    header("Location:StudentSignup?Ustatus=$postK[1]&Estatus=$postK[0]");  
}  
?  
</body>  
</html>
```

3. maincontrols.js

```
//Coded by Basura Ratnayake
//Copyright MOLE team, all rights reserved.

var fieldsK = new Boolean(true);
var imgs="" , msg="" ;var imgs1="", msg1="";
var Enames = Array ("fname", "lname", "sname", "uname", "pass", "email", "passC",
"emailC");var ERNames = Array ("First Name", "Last Name", "School Name", "Username",
"Password", "Email Address", "Confirm Password", "Confirm Email");
var INames = Array ("fs", "ls", "ss", "us", "ps", "es", "cps", "ces");
function ResetI(){
    document.getElementById("fs").setAttribute("src", "");
    document.getElementById("ls").setAttribute("src", "");
    document.getElementById("ss").setAttribute("src", "");
    document.getElementById("ds").setAttribute("src", "");
    document.getElementById("es").setAttribute("src", "");
    document.getElementById("ps").setAttribute("src", "");
    document.getElementById("cps").setAttribute("src", "");
    document.getElementById("us").setAttribute("src", "");
    document.getElementById("ces").setAttribute("src", "");
}
function SetStatusM(a, b, c){
    document.getElementById(a).setAttribute("src", b);
    document.getElementById(a).setAttribute("title", c);
}
function passVal(){
    if(document.RegMe.pass.value != document.RegMe.passC.value){
        document.RegMe.passC.focus();
        msg1="Password Confirmation doesn't Match the Password.";
        imgs1="Images_Settings/no.png";
        fieldsK = false;
    }else{
        msg1="Password Confirmed.";
        imgs1="Images_Settings/k.png";
    }
    SetStatusM("cps", imgs1, msg1);
}
function emailVal(){
    if(document.RegMe.email.value != document.RegMe.emailC.value){
        document.RegMe.emailC.focus();msg1="Email Confirmation doesn't Match the
Email.";
        imgs1="Images_Settings/no.png";
        fieldsK = false;
    }else{
        msg1="Email Confirmed.";
        imgs1="Images_Settings/k.png";
    }
    SetStatusM("ces", imgs1, msg1);
}
function CheckFLS(cName, name, RealN, val){
    if(cName == name){
        var EleN = document.getElementById(cName);
        var testV = val.test(EleN.value);
        if(testV){
            msg = "Entered "+ RealN +" is Correct.";
            imgs = "Images_Settings/k.png";
        }
    }
}
```

```

        }else{
            msg = "Entered " + RealN + " is invalid, Please Your Correct " +
RealN;
            imgs = "Images_Settings/no.png";
            fieldsK = false;
        }
    }
}

function Check4Blanks(cName, RealN, imgN){
    var EleN = document.getElementById(cName);
    if(EleN.value){
        msg = "Entered " + RealN + " is Correct.";
        imgs = "Images_Settings/k.png";
        if(cName == "pass"){
            var passV = /^[a-zA-Z]{5,25}$/.test(EleN.value);
            if(passV){
                passVal();
            }else{
                msg = "Entered Password is invalid, Please Enter a Password
with atleast 5 Letter/Numbers.";
                imgs = "Images_Settings/no.png";
                fieldsK = false;
            }
        }else if(cName == "email"){
            var emailV = /^[a-zA-Z_\.-]+@[a-zA-Z\.-]+\.(a-
z\.){2,6}$/.test(EleN.value);
            if(emailV){
                emailVal();
            }else{
                msg = "Entered Email is invalid, Please Enter Your Correct
Email Address.";
                imgs = "Images_Settings/no.png";
                fieldsK = false;
            }
        }else if(cName == "uname"){
            var userV = /^[a-zA-Z_-]{6,65}$/.test(EleN.value);
            if(userV){
                msg = "Entered " + RealN + " is Correct.";
                imgs = "Images_Settings/k.png";
            }else{
                msg = "Entered Username is invalid, Please Enter a Username
with atleast 6 Letter/Numbers or -";
                imgs = "Images_Settings/no.png";
                fieldsK = false;
            }
        }
        CheckFLS(cName, "fname", RealN, /^[a-zA-Z]{5,30}$/);
        CheckFLS(cName, "lname", RealN, /^[a-zA-Z ]{6,30}$/);
        CheckFLS(cName, "sname", RealN, /^[a-zA-Z ]{10,60}$/);
    }else{
        EleN.focus();
        msg = RealN + " Cannot be Blank, Please Enter your " + RealN;
        imgs = "Images_Settings/no.png";
        fieldsK = false;
    }
    SetStatusM(imgN, imgs, msg);
}
function CheckDOB(){

```

```

var dob = document.getElementById("dob");
if(dob.value == ""){
    msg = "Date of Birth Cannot be Blank, Please Enter your Date of Birth";
    imgs = "Images_Settings/no.png";
    fieldsK = false;
}else{
    dob.value = dob.value.replace(".", "-", "g");
    dob.value = dob.value.replace(",", "-", "g");
    dob.value = dob.value.replace("/", "-", "g");
    var dobS = new Array();
    dobS = dob.value.split("-");
    if(dobS[0] > 1990 && dobS[0] < 2016){
        if(dobS[1] > 0 && dobS[1] < 13){
            if(dobS[2] > 0 && dobS[2] < 32){
                msg = "Entered Date of Birth is Okay";
                imgs = "Images_Settings/k.png";
                fieldsK = true;
            }else{
                msg = "Entered Date of Birth is incorrent, Please Enter the Date of Birth in the Format YYYY/MM/DD";
                imgs = "Images_Settings/no.png";
                fieldsK = false;
            }
        }else{
            msg = "Entered Date of Birth is incorrent, Please Enter the Date of Birth in the Format YYYY/MM/DD";
            imgs = "Images_Settings/no.png";fieldsK = false;}}else{msg = "Entered Date of Birth is incorrent, Please Enter the Date of Birth in the Format YYYY/MM/DD";
            imgs = "Images_Settings/no.png";
            fieldsK = false;
        }
    }
    SetStatusM("ds", imgs, msg);
}
function Validate(){
    var KStatus = new Boolean(true);
    CheckDOB();
    KStatus = fieldsK;
    for(i=0; i<6; i++){
        Check4Blanks(Enames[i], ERNames[i], INames[i]);
    }
    if(KStatus == true && fieldsK == true)
        fieldsK = true;
    else
        fieldsK = false;
    return fieldsK;
}

```

iv. MOLE Account Activation

These pages deal with providing confirmation to the user after account detail submission, and for account activation.

1. success.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>MOLE Account Activation</title>
<meta charset="utf-8">
<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript" src="Images_Settings/RegMe/mainControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);function
valme(){var fieldsK = new Boolean(true);if(document.RegMe.name.value == "")fieldsK =
false;if(document.RegMe.email.value == "")fieldsK =
false;if(document.RegMe.reason.value == "")fieldsK =
false;if(document.RegMe.msg.value == "")fieldsK = false;if(fieldsK ==
false)alert("Enter all the required information");return fieldsK;}
function MM_openBrWindow(theURL,winName,features) { //v2.0
    window.open(theURL,winName,features);
}
</script>
<style type="text/css">
.style3 {
    font-size: 16px;
    font-weight: bold;
}
.style5 {color: #005788}
.style11 {
    color: #003366
}
a:link {
    text-decoration: none;
}
a:visited {
    text-decoration: none;
}
a:hover {
    text-decoration: underline;
}
a:active {
    text-decoration: none;
}
#confirmMk {
    position:absolute;
```

```

        width:643px;
        height:115px;
        z-index:1;
        left: 201px;
        top: 39px;
        visibility: visible;
    }
#confirmMn {
    position:absolute;
    width:548px;
    height:115px;
    z-index:1;
    left: 236px;
    top: 18px;
    visibility: hidden;
}

```

.style13 {color: #990000}
 .style23 {font-size: 13px}
 .style24 {font-size: 11px}
 </style>
 </head>
 <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
 </head>
 <body id="page5">
 <div class="body1">
 <div class="body2">
 <div class="main">
 <nav id="menu">

 <li class="nav1">Home
 <li class="nav2">Download
 <li class="nav3">Signup
 <li class="nav4">About us
 <li class="nav5">Contact

 </nav>
 </div>
 </div>
 </div>
 <div class="body5">
 <div class="body6">
 <div class="main">
 <div class="wrapper">
 <figure class="left"></figure>
 <h2>Welcome to Mathematics for Ordinary Level Examination !</h2>
 <blockquote></blockquote>
 <p>Mathematics for Ordinary Level Examination also known in short as MOLE, is an electronic teacher that will help students to learn the ways and means to pass the Ordinary Level

Examination(O\L) Mathematics subject. And also never worry MOLE is and always will be FREE.</p>
 <p align="center">“Think not maths as another war to fight but as a challenge worthy of taking.”</p>
 </blockquote>
 </blockquote>
 </div>
 </div>
 </div>
</div>
<div class="body7">
 <div class="main">
 <section id="content">
 <div class="wrapper">
 <p> </p>
 <article class="col2">
 <div class="pad1">
 <div id="confirmMk">
 <h2 align="center">Registration Successful</h2>
 <p align="center">A Confirmation Email is sent to your email. Click on it to complete the registration</p>
 </div>
 <p> </p>
 <p> </p>
 <p> </p>
 <p> </p>
 </div>
 </article>
 </div>
 </section>
 </div>
 </div>
<div class="body8">
 <div class="body9">
 <div class="main">
 <footer>
 <div class="col_1">
 <h3 align="center" class="MRule">ONLY ONE RULE</h3>
 <ul class="list3">
 After Installing MOLE Please Pass it on to your colleagues or to your school freely.

 <div align="center" class="greedQ">“Never be Greedy or Selfish Share with Others”</div>

 </div>
 <div class="col_2 pad_left1">
 <h3 align="center">MOLE Team Members</h3>
 MOLE Concept,Development all done by geniuses below,
 </div>
 </div>
 </div>
 </div>
</div>

```

        <div id="close_P"><a href="#close" onClick="showP()"></a></div>
        <div class="showPTC" id="fnameL1"></div>
        <div class="showPTC" id="fnameL2"></div>
        <div class="showPTC" id="eAddress"></div>
        <div class="showPTC" id="age"></div>
        <div class="showPTC" id="abtM"></div>
        <div id="Cil"></div>
</div>
<script type="text/javascript" >
    document.getElementById("MTMI_panel").style.display = 'none';
</script>
<div class="wrapper">
    <ul class="list3 col_1">
        <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara
Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/>
Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
            <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga',
'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong>
<br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha
Samarasekara</strong></a></li>
                <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara',
'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong>
<br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
            </ul>
            <ul class="list3 col_1 pad_left1">
                <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake',
'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes
to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna
Aravinda</strong></a></li>
                    <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya',
'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong>
<br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga
Weerasuriya</strong></a></li>
                </ul>
            </div>
        </div>
        <div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics
for Ordinary Level Examination">First</a>
            <p class="center style23">Copyright © 2013 <strong><a
href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
            <p class="center"><a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
                <span class="style24">This work is licensed under a <a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons
Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>. </span></p>
            </div>
        </div>
    </div>

```

```

</div>
</div>
<div class="botc"></div>
</body>
</html>

```

2. uData.php

```

<?php
if(isset($_GET['u']) && isset($_GET['p'])){
    include("ConnectMe2.php");
    $u = $_GET['u'];
    $p = $_GET['p'];
    $query = mysql_query("select username from userinfo where username='$u'");
    $Ur = mysql_num_rows($query);
    $query = mysql_query("select password from userinfo where password='$p' and
username='$u'");
    $Pr = mysql_num_rows($query);
    if($Ur == 1 && $Pr == 1){
        $Ur = details("username", "userinfo", "username = '$u'");
        echo "U = $Ur";
        echo "<br/>";
        $Pr = details("password", "userinfo", "username = '$u'");
        echo "P = $Pr";
        echo "<br/>";
        $e = details("email", "userinfo", "username = '$u'");
        echo "E = $e";
    }else{
        if($Ur == 1){
            echo "U = 1";
            echo "<br/>";
            if($p != details("password", "userinfo", "username = '$u')){
                echo "P = 0";
                echo "<br/>";
                echo "E = 0";
            }
        }else{
            echo "U = 0";
            echo "<br/>";
            echo "P = 0";
            echo "<br/>";
            echo "E = 0";
        }
    }
}else{
    echo "U = 0";
    echo "<br/>";
    echo "P = 0";
    echo "<br/>";
    echo "E = 0";
}
function details($info, $tb, $st){
    $query = "select $info from $tb where $st";

```

```

    $query = mysql_query($query);
    return mysql_result($query, 0, $info);
}
?>

```

3. userReg.php

```

<html>
<head>
</head>
<body>
<?php include("Images_Settings/RegMe/ConnectMe2.php");

$query = mysql_query("select username from userinfo where username =
'$_POST[uname]'");
$usName = mysql_num_rows($query);
$query = mysql_query("select email from userinfo where email = '$_POST[email]'");
$emailName = mysql_num_rows($query);
$postK[1]= array(0,0);

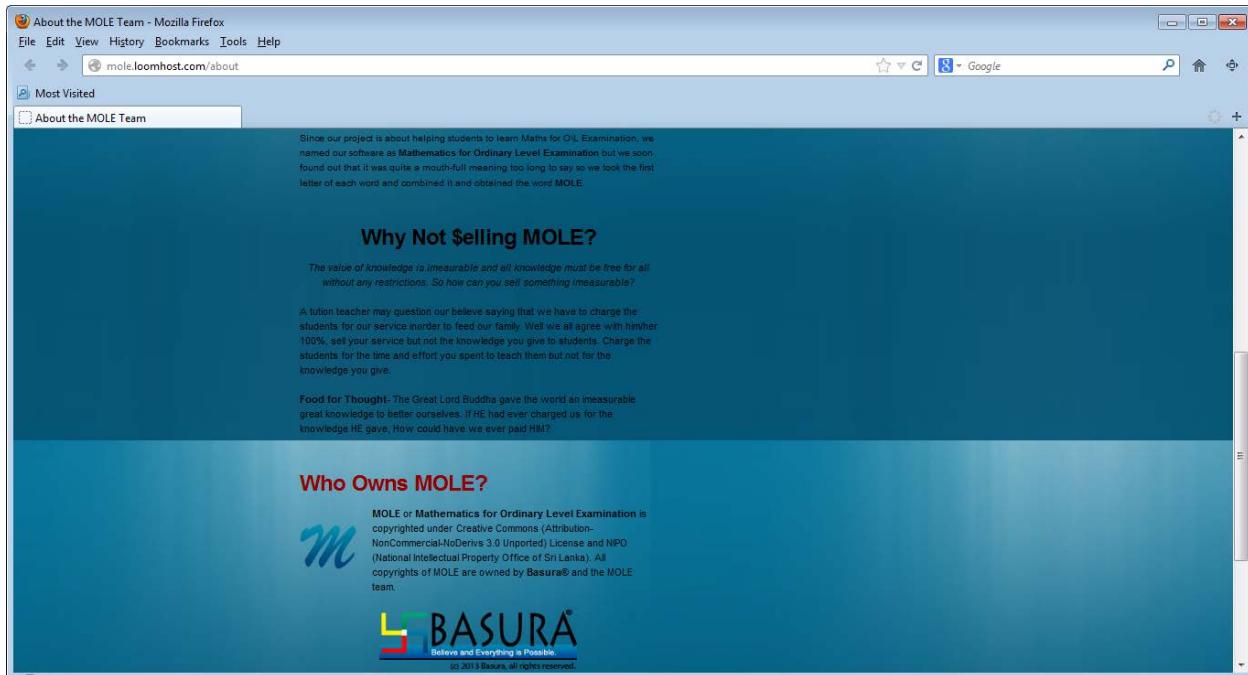
if($emailName == 0){
    $postK[0] = 0;
    $postK[1] = 0;
} else{
    $postK[0] = 1993;
}
if($usName == 0){
    $postK[0] = 0;
    $postK[1] = 0;
} else{
    $postK[1] = 1021;
}

if ($postK[0] == 0 && $postK[1] == 0){
    $fname = strip_tags($_GET["fname"]);
    $lname = strip_tags($_GET["lname"]);
    $sname = strip_tags($_GET["sname"]);
    $dob = strip_tags($_GET["dob"]);
    $uname = strip_tags($_GET["uname"]);
    $pass = strip_tags($_GET["pass"]);
    $email= strip_tags(urldecode($_GET["email"]));
    $gen = strip_tags($_GET["sex"]);
    $confirmC =md5(uniqid(rand()));
    echo $email;
    $query = "INSERT INTO temps VALUES('$confirmC','$uname', '$pass',
'$email', '$fname', '$lname', '$gen', '$sname', '$dob')";
    $Equery =mysql_query($query) or die(mysql_error()."Unable to connect to
the Database.");
    if($Equery){
        $headers = "From: no-reply@mole.loomhost.com\n";
        $headers .= "Reply-To: no-reply@mole.loomhost.com";
    }
}

```

```
$msg ="Congratulations your account details were approved by the  
MOLE team as legitimate.\r\n";  
$msg.="Click on the link below to activate your approved  
account.\r\n";  
$msg.="http://mole.loomhost.com/confirm?Code=$confirmC";  
$ms=mail($email,"Activate Your MOLE Account", $msg, $headers);  
if($ms){  
    header("Location:success");  
}else{  
    echo "An Error Occured while sending the email, Your Email  
wasn't sent.";  
}  
}  
}  
header("Location:StudentSignup?Ustatus=$postK[1]&Estatus=$postK[0]");  
}  
?  
</body>  
</html>
```

v. About Us



1. about.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>About the MOLE Team</title>
<meta charset="utf-8">

<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript" src="Images_Settings/RegMe/mainControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);
</script>
<style type="text/css">
.style5 {color: #005788}
.style11 {
    color: #003366
}
.style12 {color: #333333}
.style13 {color: #003349}
.style23 {font-size: 13px}
.style24 {font-size: 11px}
#logged {
    position:absolute;
    width:390px;
}
```

```

    height:26px;
    z-index:3;
    left: 58px;
    top: 177px;
}
.style25 {font-size: 12px}
.style26 {
    font-size: 16px;
    font-weight: bold;
}
.style27 {color: #990000}
</style>
</head>
<body id="page5">
<div class="body1">
    <div class="body2">
        <div class="main">
            <nav id="menu">
                <ul>
                    <li class="nav1"><a href="http://mole.loomhost.com">Home</a></li>
                    <li class="nav2"><a href="download">Download</a></li>
                    <li class="nav3"><a href="StudentSignup?Ustatus=0&Estatus=0">Signup</a></li>
                        <li class="nav4" id="active"><a href="#You are Here">About us</a></li>
                        <li class="nav5"><a href="contact">Contact</a></li>
                </ul>
            </nav>
        </div>
    </div>
</div>
<div class="body5">
    <div class="body6">
        <div class="main">
            <div class="wrapper">
                <figure class="left"></figure>
                <h2>Welcome to <span class="style5">Mathematics for Ordinary Level Examination</span> !</h2>
                <blockquote>
                    <blockquote>
                        <p>Mathematics for Ordinary Level Examination also known in short as <span class="showPTC"><strong>MOLE</strong></span>, is an electronic teacher that will help students to learn the ways and means to pass the Ordinary Level Examination(O\L) Mathematics subject. And also never worry MOLE is and always will be<span class="style5"> FREE</span>.</p>
                        <p align="center"><span class="Mquote">“Think not maths as another war to fight but as a challenge worthy of taking.”</span></p>
                    </blockquote>
                    </blockquote>
                </div>
            </div>
        </div>
    </div>
<div class="body7">
    <div class="main">

```

```

<section id="content">
  <div class="wrapper">
    <article class="col2">
      <div class="pad1">
        <h2 align="center"><span class="style11">MOLE Orgins</span></h2>
        <p class="style25">Our Lecturer <strong>Mr O.K.G.C Weerasekara</strong>(<strong>Gihan Weerasekara</strong>)
          asked the students of Diploma in Software Engineering 12.1 to design a
          fully functional software as our final project. It was a group project of 4 or 5
          members per group. </p>
          <p class="style25">At first we all came up with different ideas relating
          to different fields which is ofcourse total chaos but we all shared a common view to
          build something unique and helpfull so finally Basura Ratnayake (Team Leader) came up
          with an unique idea to build a software to help students learn Mathematics required
          for the Ordinary Level Examination(O\L). </p>
          <p class="style26" style="text-decoration:underline">Project Name </p>
          <p class="style25"> Since our project is about helping students to learn
          Maths for O\L Examination, we named our software as <strong>Mathematics for Ordinary
          Level Examination</strong> but we soon found out that it was quite a mouth-full
          meaning too long to say so we took the first letter of each word and combined it and
          obtained the word <strong>MOLE</strong>. </p>
          <h2 align="center"><span class="style11"><span class="showPTC">Why Not
          $elling MOLE?</span></span></h2>
          <p align="center"><em>The value of knowledge is immeasurable and all
          knowledge must be free for all without any restrictions. So how can you sell
          something immeasurable?</em></p>
          <p align="left">A tution teacher may question our believe saying that we
          have to charge the students for our service inorder to feed our family. Well we all
          agree with him/her 100%, sell your service but not the knowledge you give to
          students. Charge the students for the time and effort you spent to teach them but not
          for the knowledge you give.</p>
          <p align="left"><strong>Food for Thought</strong>- The Great Lord Buddha
          gave the world an immeasurable great knowledge to better ourselves. If HE had ever
          charged us for the knowledge HE gave, How could have we ever paid HIM?</p>
          <h2 align="left"><span class="style27">Who Owns MOLE?</span></h2>
          <p align="left"><strong><span class="style27"><strong></strong></span>MOLE </strong>or <strong>Mathematics for Ordinary Level
          Examination</strong> is copyrighted under<span class="pad1">Creative Commons
          (Attribution-NonCommercial-NoDerivs 3.0 Unported) License and NIPO (National
          Intellectual Property Office of Sri Lanka). All copyrights of MOLE are owned by
          <strong>Basura&reg;</strong> and the MOLE team.</span></p>
          <p align="center"></p>
          <p align="center">Basura and the MOLE logo are registered trademarks of
          Basura</p>
        </div>
      </article>
      <article class="col1 pad_left1">
        <h2>MOLE Team Members</h2>
        <ul class="list2">
          <li class="style12"><span class="termsC showPTC"><a href="#Basura"><span
          class="style11">B</span>asura <span class="style11">R</span>atnayake</a></span></li>

```

```

<li class="termsC showPTC"><a href="#Visuddha"><span class="style13">V</span>isuddha <span class="style11">S</span>amarasekara</a></li>
<li class="termsC showPTC"><a href="#Prasanga"><span class="style13">P</span>rasanga <span class="style11">W</span>eerasuriya</a></li>
<li class="termsC showPTC"><a href="#Nipuna"><span class="style11">N</span>ipuna <span class="style11">A</span>ravinda</a></li>
<li class="termSC showPTC"><a href="Punarjeewa"><span class="style11">P</span>unarjeewa <span class="style11">A</span>beysekera</a></li>
</ul>
</article>
</div>
</section>
</div>
</div>
<div class="body8">
<div class="body9">
<div class="main">
<footer>
<div class="col_1">
<h3 align="center" class="MRule">ONLY ONE RULE</h3>
<ul class="list3">
<li>After Installing MOLE Please Pass it on to your colleagues or to your school <span class="free">freely</span>.</li>
<li>
<div align="center" class="greedQ">Never be Greedy or Selfish Share with Others</div>
</li>
</ul>
</div>
<div class="col_2 pad_left1">
<h3 align="center">MOLE Team Members</h3>
<span class="botL">MOLE Concept,Development all done by geniuses below,</span>
<div id="MTMI_panel">
<div id="close_P"><a href="#close" onClick="showP()"></a></div>
<div class="showPTC" id="fnameL1"></div>
<div class="showPTC" id="fnameL2"></div>
<div class="showPTC" id="eAddress"></div>
<div class="showPTC" id="age"></div>
<div class="showPTC" id="abtM"></div>
<div id="Cil"></div>
</div>
<script type="text/javascript" >
document.getElementById("MTMI_panel").style.display = 'none';
</script>
<div class="wrapper">
<ul class="list3 col_1">

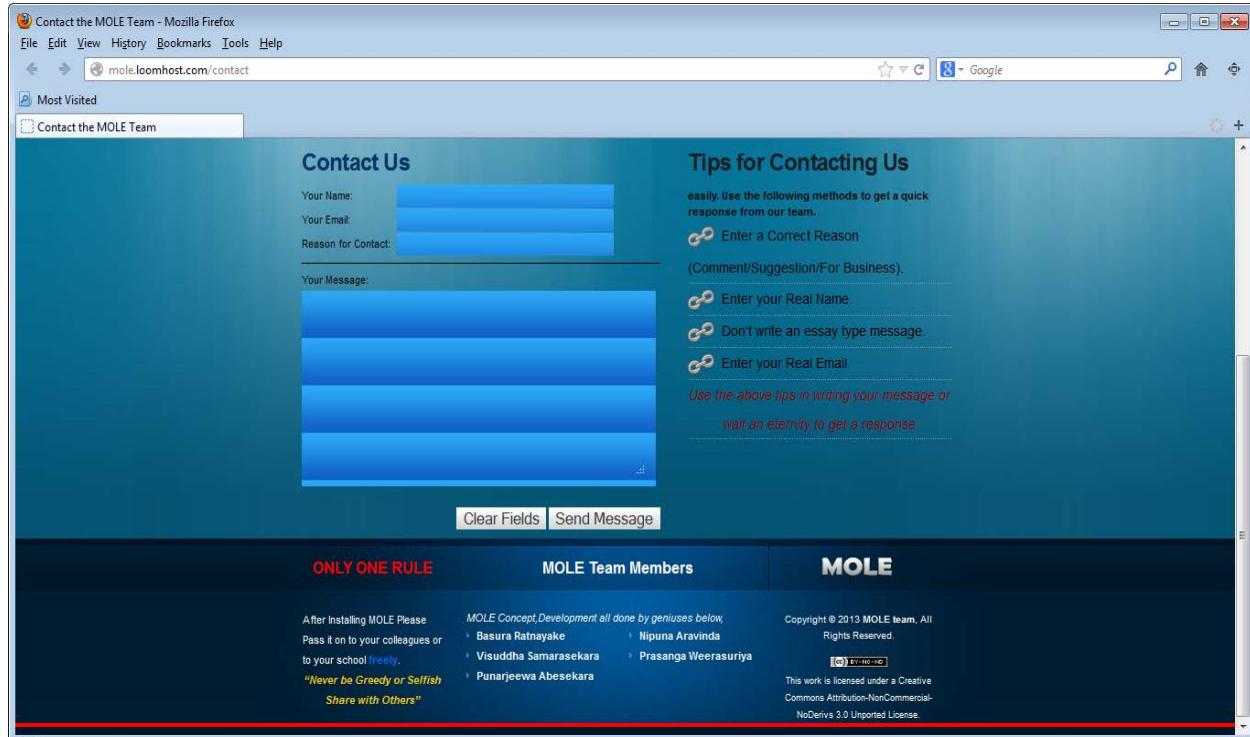
```

```

        <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/> Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')">Basura Ratnayake</a></li>
        <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga', 'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong> <br/> Likes to play games, watch movies, listen to music.', 'male.png')">Visuddha Samarasekara</a></li>
        <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara', 'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong> <br/> Likes to read books, and increase my knowledge.', 'male.png')">Punarjeewa Abesekara</a></li>
    </ul>
    <ul class="list3 col_1 pad_left1">
        <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake', 'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes to read books and novels to increase my writing skill.', 'male.png')">Nipuna Aravinda</a></li>
        <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya', 'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong> <br/> Likes to be in tension and enjoy the life.', 'male.png')">Prasanga Weerasuriya</a></li>
    </ul>
</div>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <a href="about.html">MOLE team</a>, All Rights Reserved.</p>
    <p class="center"><a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
    </div>
</div>
</div>
<div class="botc"></div>
</body>
</html>

```

vi. Contact Us



1. contact.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Contact the MOLE Team</title>
<meta charset="utf-8">

<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);
function valme(){
var fieldsK = new Boolean(true);
    if(document.RegMe.name.value == "")
        fieldsK = false;
    if(document.RegMe.email.value == ""){
        fieldsK = false;
    }else{
        var emailV = /^[a-zA-Z_\.]+\@[a-zA-Z_\.]+\.[a-zA-Z]{2,6}\$/.test(document.RegMe.email.value);
        if(!emailV)
            fieldsK = false;
    }
}

```

```

        }
        if(document.RegMe.reason.value == "")
            fieldsK = false;
        if(document.RegMe.msg.value == "")
            fieldsK = false;
        if(fieldsK == false)
            alert("Fill all the required information with Accurate Details.");
        return fieldsK;
    }

```

</script>

```

<style type="text/css">
    .style3 {
        font-size: 16px;
        font-weight: bold;
    }
    .style5 {color: #005788}
    .style11 {
        color: #003366
    }
    .style12 {color: #333333}
    .style23 {font-size: 13px}
    .style24 {font-size: 11px}
</style>

```

</head>

```

<body id="page5">
    <div class="body1">
        <div class="body2">
            <div class="main">
                <nav id="menu">
                    <ul>
                        <li class="nav1"><a href="http://mole.loomhost.com">Home</a></li>
                        <li class="nav2"><a href="download">Download</a></li>
                        <li class="nav3"><a href="StudentSignup?Ustatus=0&Estatus=0">Signup</a></li>
                            <li class="nav4"><a href="about">About us</a></li>
                            <li class="nav5" id="active"><a href="#You are Here">Contact</a></li>
                        

```



```

        <li class="termsC showPTC">Enter your
Real Name.</li>
        <li class="termsC showPTC">Don't write
an essay type message.</li>
        <li class="termsC showPTC">Enter your
Real Email.</li>

        <li class="style12">
            <div align="center" class="Tnc">Use the above tips in writing your
message or wait an eternity to get a response</div>
        </li>
    </ul>
</article>
</div>
</section>
</div>
</div>
<div class="body8">
    <div class="body9">
        <div class="main">
            <footer>
                <div class="col_1">
                    <h3 align="center" class="MRule">ONLY ONE RULE</h3>
                    <ul class="list3">
                        <li>After Installing MOLE Please Pass it on to your colleagues
                            or to your school <span class="free">freely</span>.</li>
                        <li>
                            <div align="center" class="greedQ">Never be Greedy or Selfish
                            Share with Others&#8221;</div>
                        </li>
                    </ul>
                </div>
                <div class="col_2 pad_left1">
                    <h3 align="center">MOLE Team Members</h3>
                    <span class="botL">MOLE Concept,Development all done by geniuses
below,</span>
                    <div id="MTMI_panel">
                        <div id="close_P"><a href="#close" onClick="showP()"></a></div>
                        <div class="showPTC" id="fnameL1"></div>
                        <div class="showPTC" id="fnameL2"></div>
                        <div class="showPTC" id="eAddress"></div>
                        <div class="showPTC" id="age"></div>
                        <div class="showPTC" id="abtM"></div>
                        <div id="Cil"></div>
                    </div>
                    <script type="text/javascript" >
                        document.getElementById("MTMI_panel").style.display = 'none';
                    </script>
                <div class="wrapper">
                    <ul class="list3 col_1">

```

```

        <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/> Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
        <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga', 'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong> <br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha Samarasekara</strong></a></li>
        <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara', 'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong> <br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
    </ul>
    <ul class="list3 col_1 pad_left1">
        <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake', 'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna Aravinda</strong></a></li>
        <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya', 'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong> <br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga Weerasuriya</strong></a></li>
    </ul>
</div>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <strong><a href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
    <p class="center"><a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
    </div>
</div>
</div>
<div class="botc"></div>
<?php
if(isset($_GET["rt"])){
    $Sname = $_POST['Sname'];
    $email = $_POST['email'];
    $res = $_POST['reason'];
    $msg = $_POST['msg'];
    $msg2 = $msg;
    $headers = "From: $email\n";
    $headers .= "Reply-To: amuthupuwath@gmail.com";
    $msg ="Name: $Sname ($email)\r\n ";
    $msg .= "Reason: $res\r\n";
    $msg .= "Message: $msg2";
}

```

```

$ms=mail("amuthupuwath@gmail.com",$res, $msg, $headers);
if($ms){
    echo "<script>alert('You Message was Successfully Sent');</script>";
}else{
    echo "<script>alert('Your Message want't sent due to an
error');</script>";
}
?>
</body>
</html>

```

2. confirm.php

```

<!DOCTYPE html>
<html lang="en">
<head>
<title>MOLE Account Activation</title>
<meta charset="utf-8">
<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript" src="Images_Settings/RegMe/mainControl.js"></script>
<script type="text/javascript">preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);
</script>
<style type="text/css">
.style3 {
    font-size: 16px;
    font-weight: bold;
}
.style5 {color: #005788}
.style11 {
    color: #003366
}
a:link {
    text-decoration: none;
}
a:visited {
    text-decoration: none;
}
a:hover {
    text-decoration: underline;
}
a:active {
    text-decoration: none;
}
#confirmMk {
    position:absolute;
    width:512px;
    height:115px;

```

```

    z-index:1;
    left: 240px;
    top: 39px;
}
#confirmMn {
    position:absolute;
    width:548px;
    height:115px;
    z-index:1;
    left: 236px;
    top: 18px;
}
.style13 {color: #990000}
.style23 {font-size: 13px}
.style24 {font-size: 11px}
.style10 {color: #FFFFFF;
    font-weight: bold;
}
.logged {position:absolute;
    width:390px;
    height:26px;
    z-index:3;
    left: 58px;
    top: 177px;
}

```

}

</style>

<meta http-equiv="Content-Type" content="text/html; charset=utf-8">

</head>

<body id="page5">

<div class="body1">

<div class="body2">

<div class="main">

<nav id="menu">

<li class="nav1">Home

<li class="nav2">Download

<li class="nav3">Signup

<li class="nav4">About us

<li class="nav5">Contact

</nav>

</div>

</div>

<div class="body5">

<div class="body6">

<div class="main">

<div class="wrapper">

<figure class="left"></figure>

<h2>Welcome to Mathematics for Ordinary Level Examination !</h2>

<blockquote>

<blockquote>


```

<div class="body9">
  <div class="main">
    <footer>
      <div class="col_1">
        <h3 align="center" class="MRule">ONLY ONE RULE</h3>
        <ul class="list3">
          <li>After Installing MOLE Please Pass it on to your colleagues or to your school <span class="free">freely</span>.</li>
          <li>
            <div align="center" class="greedQ">Never be Greedy or Selfish
Share with Others</div>
          </li>
        </ul>
      </div>
      <div class="col_2 pad_left1">
        <h3 align="center">MOLE Team Members</h3>
        <span class="botL">MOLE Concept,Development all done by geniuses below,</span>
        <div id="MTMI_panel">
          <div id="close_P"><a href="#close" onClick="showP()"></a></div>
          <div class="showPTC" id="fnameL1"></div>
          <div class="showPTC" id="fnameL2"></div>
          <div class="showPTC" id="eAddress"></div>
          <div class="showPTC" id="age"></div>
          <div class="showPTC" id="abtM"></div>
          <div id="Cil"></div>
        </div>
        <script type="text/javascript" >
          document.getElementById("MTMI_panel").style.display = 'none';
        </script>
      <div class="wrapper">
        <ul class="list3 col_1">
          <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/> Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
          <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga', 'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong> <br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha Samarasekara</strong></a></li>
          <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara', 'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong> <br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
        </ul>
        <ul class="list3 col_1 pad_left1">
          <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake', 'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna Aravinda</strong></a></li>
          <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya', 'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong>'><strong>Prasanga</strong></a></li>
        </ul>
      </div>
    </div>
  </div>

```

```

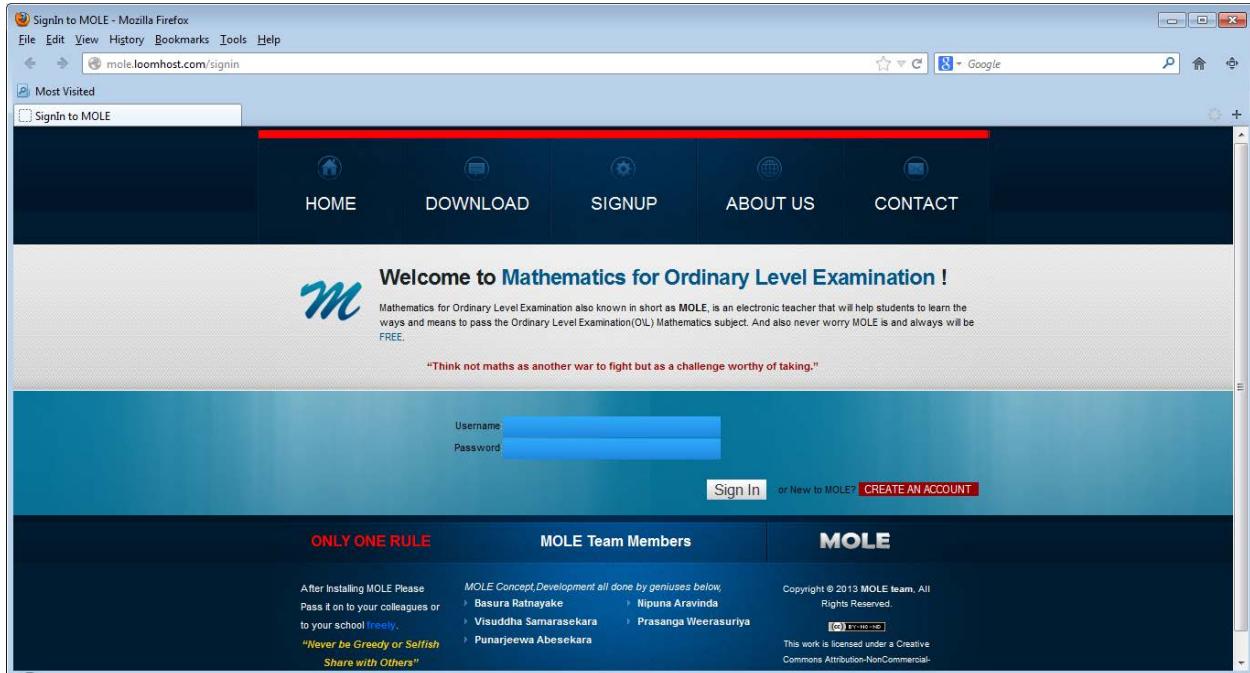
<br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga
Weerasuriya</strong></a></li>
        </ul>
    </div>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics
for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <strong><a
href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
    <p class="center"><a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons
Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
    </div>
    </footer>
</div>
</div>
<div class="botc"></div>
<?php
if(isset($_GET["Code"])){
    include("Images_Settings/RegMe/ConnectMe2.php");
    $code = $_GET["Code"];
    $query = mysql_query("select scode from temps where scode='$code'");
    $sRows = mysql_num_rows($query);

    if($sRows == 1){
        echo "<script
type='text/javascript'>document.getElementById('confirmMk').style.visibility =
'visible';</script>";
        $records = array();
        $record[0] = details("username", $code);
        $record[1] = details("password", $code);
        $record[2] = details("email", $code);
        $query = "insert into userinfo set username='".$record[0]',
password='".$record[1]', email='".$record[2]';
        $query = mysql_query($query);
        $record[1] = details("fname", $code);
        $record[2] = details("lname", $code);
        $record[3] = details("sex", $code);
        $record[4] = details("sname", $code);
        $record[5] = details("dob", $code);
        $query = "insert into userpersonal set username='".$record[0]',
fname='".$record[1]', lname='".$record[2]', sex='".$record[3]', sname='".$record[4]',
dob='".$record[5]' ";
        $query = mysql_query($query);
        $query = "insert into friendchat set username='".$record[0]', online='N'";
        $query = mysql_query($query);
        $query = "delete from temps where scode='".$code'";
        $query = mysql_query($query);
        $us = $_SESSION['StudentM'];
    }else{
}
}

```

```
echo "<script  
type='text/javascript'>document.getElementById('confirmMn').style.visibility =  
'visible';</script>";  
}  
}else{  
    header("Location:page-not-found");  
}  
function details($info, $sc){  
    $query = "select $info from temps where scode='$sc'";  
    $query = mysql_query($query);  
    return mysql_result($query, 0, $info);  
}  
?>  
</body>  
</html>
```

vii. Sign In



1. signin.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>SignIn to MOLE</title>
<meta charset="utf-8">
<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript" src="Images_Settings/RegMe/mainControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);
var fStatus = new Boolean(true);
function valme(){
    ChB("user", "ces", "Username");
    ChB("pass", "ces1", "Password");
    return fStatus;}
function ChB(cName, ces, c){
    var EleN = document.getElementById(cName);
    var a, b;
    if(EleN.value){
        a = c + " is Okay.";
        b = "Images_Settings/k.png";
        fStatus =true;
    }else{
        fStatus =false;
    }
}

```

```

        a = c + " Cannot be Blank.";
        b = "Images_Settings/no.png";
        fStatus=false;
    }
document.getElementById(ces).setAttribute("src", b);
document.getElementById(ces).setAttribute("title", a);
}
function PWUC(){
    SetStatusM("ces", "Images_Settings/k.png", "Username is Okay");
    SetStatusM("ces1", "Images_Settings/no.png", "Entered Password Doesn't match
with the username, Enter the Correct Password.");
}
function PWUW(){
    SetStatusM("ces", "Images_Settings/no.png", "Entered Username is not
registered.");
    SetStatusM("ces1", "Images_Settings/no.png", "A Password cannot be present for
an Unregistered Account.");
}
</script>
<style type="text/css">
.style5 {color: #005788}
a:link {
    text-decoration: none;
}
a:visited {
    text-decoration: none;
}
a:hover {
    text-decoration: underline;
}
a:active {
    text-decoration: none;
}
#confirmMk {
    position:absolute;
    width:509px;
    height:160px;
    z-index:1;
    left: 201px;
    top: 39px;
    visibility: visible;
}
#confirmMn {
    position:absolute;
    width:548px;
    height:115px;
    z-index:1;
    left: 236px;
    top: 18px;
    visibility: hidden;
}
.style23 {font-size: 13px}
.style24 {font-size: 11px}
.style25 {font-size: 12px}
.style26 {color: #9AD5DD}

```

```

#apDiv1 {
    position:absolute;
    width:307px;
    height:28px;
    z-index:1;
    left: 712px;
    top: 297px;
}
</style>
</head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body id="page5">
<div class="body1">
    <div class="body2">
        <div class="main">
            <nav id="menu">
                <ul>
                    <li class="nav1"><a href="http://mole.loomhost.com">Home</a></li>
                    <li class="nav2"><a href="download">Download</a></li>
                    <li class="nav3"><a href="StudentSignup?Ustatus=0&Estatus=0">Signup</a></li>
                        <li class="nav4"><a href="about">About us</a></li>
                        <li class="nav5"><a href="contact">Contact</a></li>
                </ul>
            </nav>
        </div>
    </div>
</div>
<div class="body5">
    <div class="body6">
        <div class="main">
            <div class="wrapper">
                <figure class="left"></figure>
                <h2>Welcome to <span class="style5">Mathematics for Ordinary Level Examination</span> !</h2>
                <blockquote>
                    <blockquote>
                        <p>Mathematics for Ordinary Level Examination also known in short as <span class="showPTC"><strong>MOLE</strong></span>, is an electronic teacher that will help students to learn the ways and means to pass the Ordinary Level Examination(O\L) Mathematics subject. And also never worry MOLE is and always will be<span class="style5"> FREE</span>.</p>
                    <div id="apDiv1">
                        <form name="signUp" method="post" action="StudentSignup?Ustatus=0&Estatus=0">
                            <div align="left">or New to MOLE?
                                <input name="signup" type="submit" class="signRed" id="signup" value="CREATE AN ACCOUNT" title="Register for a MOLE Account, Its Free">
                            </div>
                        </form></div>
                        <p align="center"><span class="Mquote">“&#8220;Think not maths as another war to fight but as a challenge worthy of taking.&#8221;</span></p>
                    </blockquote>
                </div>
            </div>
        </div>
    </div>
</div>

```

```

        </blockquote>
    </div>
</div>
</div>
</div>
</div>
</div>
</div>
<div class="body7">
    <div class="main">
        <section id="content">
            <div class="wrapper">
                <p>&nbsp;</p>
                <article class="col2">
                    <div class="pad1">
                        <div id="confirmMk">
                            <article class="col2">
                                <div class="pad1">
                                    <form method="post" name="RegMe" id="RegMe" action="signin?tryLog=1"
onSubmit="return(valme())">
                                        <div>
                                            <div align="center">
                                                </div>
                                            <div class="wrapper">
                                                <div align="right"><strong>Username<span class="style26">:</span>
</strong> </div>
                                            <div class="bg">
                                                <input id="user" type="text" name="user" maxlength="50"
class="input"/>
                                                <img src="" alt="" name="Status" width="33" height="31" id="ces"
style="" />
                                            </div>
                                            <div class="wrapper">
                                                <div align="right"><strong>Password<span
class="style26">:</span></strong> </div>
                                                <div class="bg">
                                                    <input id="pass" type="password" name="pass" maxlength="50"
class="input"/>
                                                    <img src="" alt="" name="Status" width="33" height="31" id="ces1"
style="" />
                                                </div>
                                                <div align="right"><br/>
                                                    <input type="submit" class="button" Value="Sign In" title="Sign in
to your MOLE Account">
                                                </div>
                                            </div>
                                        </div>
                                    </form>
                                </div>
                            </article>
                        </div>
                    <article>
                        <p>&nbsp;</p>
                        <p>&nbsp;</p>
                        <p>&nbsp;</p>
                    </div>
                </article>
            </div>
        </section>
    </div>

```

```

</div>
<div class="body8">
  <div class="body9">
    <div class="main">
      <footer>
        <div class="col_1">
          <h3 align="center" class="MRule">ONLY ONE RULE</h3>
          <ul class="list3">
            <li>After Installing MOLE Please Pass it on to your colleagues or to your school <span class="free">freely</span>.</li>
            <li>
              <div align="center" class="greedQ">&#8220;Never be Greedy or Selfish Share with Others&#8221;</div>
            </li>
          </ul>
        </div>
        <div class="col_2 pad_left1">
          <h3 align="center">MOLE Team Members</h3>
          <span class="botL">MOLE Concept,Development all done by geniuses below,</span>
          <div id="MTMI_panel">
            <div id="close_P"><a href="#close" onClick="showP()"></a></div>
            <div class="showPTC" id="fnameL1"></div>
            <div class="showPTC" id="fnameL2"></div>
            <div class="showPTC" id="eAddress"></div>
            <div class="showPTC" id="age"></div>
            <div class="showPTC" id="abtM"></div>
            <div id="Cil"></div>
          </div>
          <script type="text/javascript" >
            document.getElementById("MTMI_panel").style.display = 'none';
          </script>
          <div class="wrapper">
            <ul class="list3 col_1">
              <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/> Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
              <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga', 'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong> <br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha Samarasekara</strong></a></li>
              <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara', 'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong> <br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
            </ul>
            <ul class="list3 col_1 pad_left1">
              <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake', 'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna Aravinda</strong></a></li>
            </ul>
          </div>
        </div>
      </div>
    </div>
  </div>
</div>

```

```

        <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya',
'prasangaweerasoorya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong>
<br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga
Weerasuriya</strong></a></li>
    </ul>
</div>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics
for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <strong><a
href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
    <p class="center"><a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons
Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
    </div>
</footer>
</div>
</div>
<div class="botc"></div>
<?php
if(isset($_GET["tryLog"])){
    include("Images_Settings/RegMe/ConnectMe2.php");
    $username = strip_tags($_POST["user"]);
    $pass = strip_tags($_POST["pass"]);
    $query = mysql_query("select username from userinfo where username =
'$username'");
    $user = mysql_num_rows($query);
    $query = mysql_query("select password from userinfo where password = '$pass'
and username = '$username'");
    $pass = mysql_num_rows($query);
    if($user == 1 && $pass == 1){
        echo"<meta http-equiv='refresh'
content='1;url=MyProfile.php?u=$username'>";
    }else{
        if($user == 1 && $pass == 0){
            echo "<script type='text/javascript' language='javascript'>";
            echo "PWUC();";
            echo "</script>";
            exit;
        }else if($user == 0 && $pass == 1){
            echo "<script type='text/javascript' language='javascript'>";
            echo "PWUW();";
            echo "</script>";
        }else if($user == 0 && $pass == 0){
            echo "<script type='text/javascript' language='javascript'>";
            echo "PWUW();";
            echo "</script>";
        }
    }
}
}

```

```
?>
</body>
</html>
```

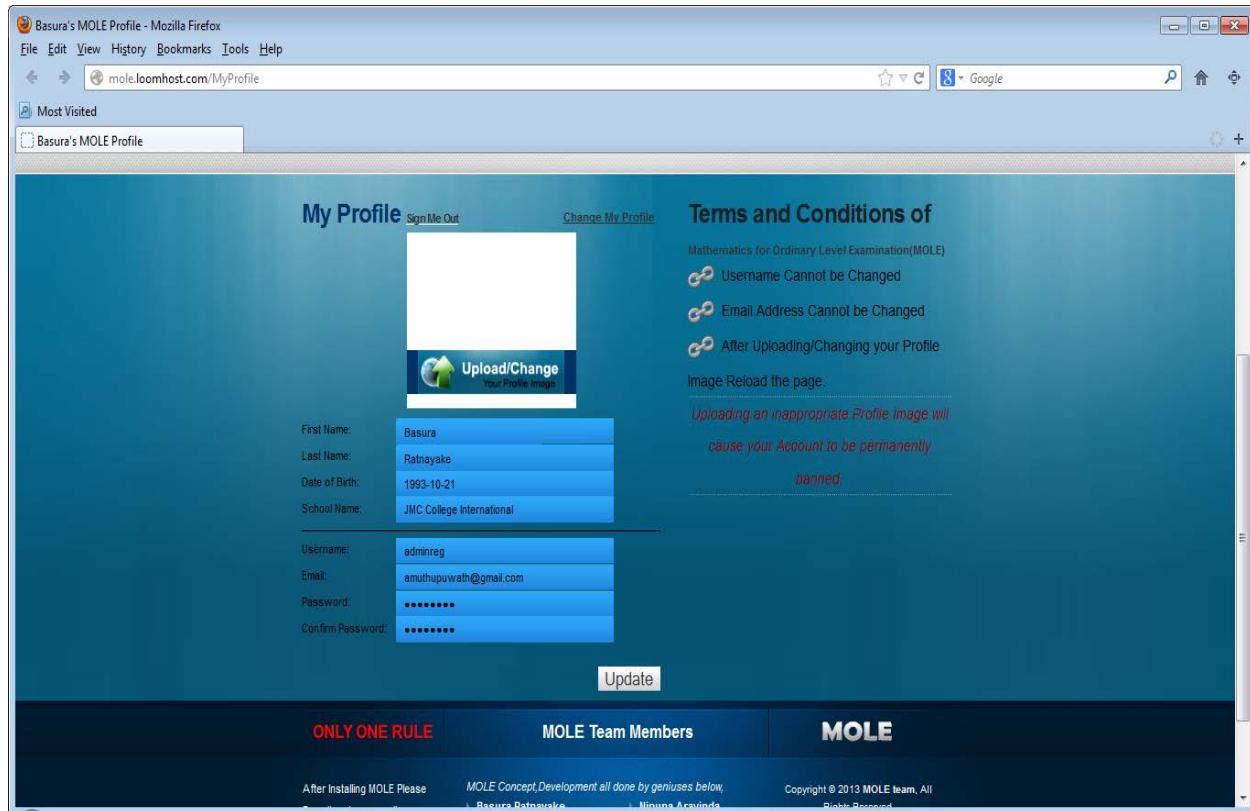
2. userL.php

```
<html>
<body>
<?php
include("Images_Settings/RegMe/ConnectMe2.php");
ob_start();
session_start();
if(isset($_GET["mD"])){
sign0();
}
function sign0(){
    session_destroy();
    header("Location:http://mole.loomhost.com");
}
function detailsT($info, $sc, $table){
    $query = "select $info from $table where $sc";
    $query = mysql_query($query);
    return mysql_result($query, 0, $info);
}
?>
</body>
</html>
```

3. connectMe2.php

```
<html>
<head>
</head>
<body>
<?php
$con = mysql_connect("mysql.loomhost.com", "u176185973_kbnbr", "mywins13") or
die(mysql_error());
mysql_select_db("u176185973_mstud", $con) or die(mysql_error());
?>
</body>
</html>
```

viii. My Profile



1. MyProfile.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<script type="text/javascript" src="Images_Settings/profile.js"></script>
<?php
include("Images_Settings/RegMe/userL.php");
include("Images_Settings/RegMe/ConnectMe2.php");
if(isset($_SESSION['StudentM'])){
    $us = $_SESSION['StudentM'];
    $fname = detailsT("fname", "username = '$us'", "userpersonal");
    $proI="http://moles.loomhost.com/students/$us";
    echo "<title>$fname's MOLE Profile</title>";
    if(isset($_GET['vc'])){
        $fn=$_POST["fname"];
        $ln=$_POST["lname"];
        $sn=$_POST["sname"];
        $db=$_POST["dob"];
        $ps=$_POST["pass"];
        $query ="UPDATE userpersonal SET fname ='$fn', lname='$ln', sname='$sn',
        dob='$db' WHERE username = '$us'";
        $query1 = "UPDATE userinfo SET password ='$ps' WHERE username = '$us'";
        if(mysql_query($query) && mysql_query($query1)){

```

```

        echo "<script type='text/javascript'>alert('Your Information
Successfully Updated.');//</script>";
    }else{
        echo "<script type='text/javascript'>alert('Sorry a Problem
Occurred while Updating.');//</script>";
    }
    echo "<meta http-equiv='refresh' content='1;url=MyProfile'>";
}else{
    $email = detailsT("email", "username = '$us'", "userinfo");
    $lname = detailsT("lname", "username = '$us'", "userpersonal");
    $sname = detailsT("sname", "username = '$us'", "userpersonal");
    $dob = detailsT("dob", "username = '$us'", "userpersonal");
    $pass = detailsT("password", "username = '$us'", "userinfo");
    echo "<script
type='text/javascript'>fields[0]='$fname';fields[1]='$lname';fields[2]='$sname';field
s[3]='$dob';fields[4]='$pass';fields[5]='$email';fields[6]='$us';</script>";
}
}else{
    if(isset($_GET["u"])){
        $_SESSION['StudentM']=$_GET["u"];
        header("Location:MyProfile.php");
    }else{
        header("Location:page-not-found.php");
    }
}
?>
<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);function
MM_openBrWindow(theURL,winName,features){window.open(theURL,winName,features);}
</script>
<style type="text/css">
.style5 {color: #005788}
.style11 {
    color: #003366
}
.style12 {color: #333333}
#uFile {
    position:absolute;
    width:231px;
    height:50px;
    z-index:1;
    left: 202px;
    top: 200px;
    background-color:#003366;
}
#pImg {
    position:absolute;
    width:231px;
    height:200px;

```

```

        z-index:1;
        top: 67px;
        background-color:#FFFFFF;
        left: 202px;
    }
    .style13 {
        color: #333333
    }
    .style23 {font-size: 13px}
    .style24 {font-size: 11px}
    .style25 {font-size: 14px}
    #chngP {
        position:absolute;
        width:200px;
        height:25px;
        z-index:1;
        left: 341px;
        top: 39px;
    }
    .style27 {color: #333333; font-weight: bold; }
    #pvalues {
        position:absolute;
        width:200px;
        height:81px;
        z-index:1;
        left: 187px;
        top: 283px;
        visibility: visible;
    }
    #pvalues1 {
        position:absolute;
        width:389px;
        height:115px;
        z-index:1;
        left: 187px;
        top: 478px;
    }
    #pvalues3 {
        position:absolute;
        width:200px;
        height:38px;
        z-index:1;
        left: 187px;
        top: 418px;
        visibility: visible;
    }

```

</style>

</head>

<body id="page5">

<div class="body1">

<div class="body2">

<div class="main">

<nav id="menu">

<li class="nav1">Home

```

        <li class="nav2"><a href="download">Download</a></li>
        <li class="nav3"><a href="#You are Here">Signup</a></li>
        <li class="nav4"><a href="about">About us</a></li>
        <li class="nav5"><a href="contact">Contact</a></li>
    </ul>
</nav>
</div>
</div>
<div class="body5">
    <div class="body6">
        <div class="main">
            <div class="wrapper">
                <figure class="left"></figure>
                <h2>Welcome to <span class="style5">Mathematics for Ordinary Level Examination</span> !</h2>
                <blockquote>
                    <blockquote>
                        <p>Mathematics for Ordinary Level Examination also known in short as <span class="showPTC"><strong>MOLE</strong></span>, is an electronic teacher that will help students to learn the ways and means to pass the Ordinary Level Examination(O\L) Mathematics subject. And also never worry MOLE is and always will be<span class="style5"> FREE</span>.</p>
                        <p align="center"><span class="Mquote">“&#8220;Think not maths as another war to fight but as a challenge worthy of taking.&#8221;</span></p>
                    </blockquote>
                    </blockquote>
                </div>
            </div>
        </div>
    </div>
</div>
<div class="body7">
    <div class="main">
        <section id="content">
            <div class="wrapper">
                <article class="col2">
                    <div class="pad1">
                        <h2 class="style11">My Profile <span class="style25"><a href="Images_Settings/RegMe/userL?mD=1"><span class="style13">Sign Me Out</span></a></span></h2>
                        <div id="chngP">
                            <div align="right"><a href="#Change Profile" class="style27" onClick="hideV()">Change My Profile</a></div>
                        </div>
                        <div id="pvalues1">
                            <form id="RegMe" name="RegMe"> <div class="wrapper"> <div class="bg">
                                <input id="pn" type="password" maxlength="30" class="input" value="" disabled/>
                            </div>
                            <div class="bg">
                                <input id="pcn" type="password" maxlength="30" class="input" value="" disabled/>
                            </div> </div>
                        </form></div>
                    </div>
                </article>
            </div>
        </div>
    </div>
</div>

```

```

<p class="style11">&nbsp;</p>
<div id="pvalues">
    <form id="RegMe" name="RegMe"> <div class="wrapper">
        <div class="bg">
            <input id="fn" type="text" maxlength="30" class="input" value="" disabled/>
        </div>
        </div>
        <div class="bg">
            <input id="ln" type="text" maxlength="30" class="input" value="" disabled/>
        </div>
        <div class="bg">
            <input id="dn" type="text" maxlength="30" class="input" value="" disabled/>
        </div>
        <div class="bg">
            <input id="sn" type="text" maxlength="30" class="input" value="" disabled/>
        </div>
    </form></div>
<p class="style11">&nbsp;</p>
<p class="style11">&nbsp;</p>
<div id="pvalues3">
    <form id="RegMe" name="RegMe"> <div class="wrapper">
        <div class="bg">
            <input id="uname1" type="text" maxlength="30" class="input" value="" disabled/>
        </div>
        </div>
        <div class="bg">
            <input id="email1" type="text" maxlength="30" class="input" value="" disabled/>
        </div>
    </form></div>
<p class="style11">&nbsp;</p>
<div class="myPic" id="myPic">
    <div id="pImg"></div>
    <p>&nbsp;</p>
    <div id="uFile">
        <p align="center"><a href="#Upload">','showU','width=270,height=200')"></a></p>
    </div>
    </div>
    <form method="post" id="RegMe" name="RegMe" action="MyProfile?vc=1" onSubmit="return(Validate())">
        <div>
            <div class="wrapper"> <strong>First Name:</strong>
            <div class="bg">
                <input id="fname" type="text" name="fname" maxlength="30" class="input" value="" />
                <img alt="" name="Status" width="33" height="31" id="fs" />
            </div>
        </div>
    </form>
</div>

```

```

        </div>
        <div class="wrapper"> <strong>Last Name:</strong>
            <div class="bg">
                <input id="lname" type="text" name="lname" maxlength="30"
class="input" value="" />
                    <img alt="" name="Status" width="33" height="31" id="ls" />
            </div>
            <div class="wrapper"> <strong>Date of Birth:</strong>
                <div class="bg">
                    <input id="dob" type="text" name="dob" maxlength="10"
class="input" value="YYYY/MM/DD" />
                    <img alt="" name="Status" width="33" height="31" id="ds" />
            </div>
            <div class="wrapper"> <strong>School Name:</strong>
                <div class="bg">
                    <input id="sname" type="text" name="sname" maxlength="60"
class="input" value="" />
                    <img alt="" name="Status" width="33" height="31" id="ss" />
            </div>
            <hr/>
            <div class="wrapper"> <strong>Username:</strong>
                <div class="bg">
                    <input id="uname" type="text" name="uname" maxlength="65"
class="input" value="" disabled/>
                    <img alt="" name="Status" width="33" height="31" id="us" />
            </div>
            <div class="wrapper"> <strong>Email:</strong>
                <div class="bg">
                    <input id="email" type="text" name="email" maxlength="65"
class="input" value="" disabled/>
                    <img alt="" name="Status" width="33" height="31" id="es" />
            </div>
            <div class="wrapper"> <strong>Password:</strong>
                <div class="bg">
                    <input id="pass" type="password" name="pass" maxlength="25"
class="input"/>
                    <img alt="" name="Status" width="33" height="31" id="ps" />
            </div>
            <div class="wrapper"> <strong>Confirm Password:</strong>
                <div class="bg">
                    <input id="passC" type="password" name="passC" maxlength="25"
class="input" value="" />
                    <img alt="" name="Status" width="33" height="31" id="cps" />
            </div>
            <div align="right"><br/>
                <input type="submit" class="button" value="Update">
            </div>
        </div>

```

```

        </form>
    </div>
</article>
<article class="col1 pad_left1">
    <h2>Terms and Conditions of</h2>
    <h5 class="style13">Mathematics for Ordinary Level Examination(MOLE)</h5>
    <ul class="list2">
        <li class="style12"><span class="termsC showPTC">Username
Cannot be Changed</span></li>
        <li class="termsC showPTC">Email
Address Cannot be Changed</li>
        <li class="termsC showPTC">After
Uploading/Changing your Profile Image Reload the page.</li>
        <li class="style12">
            <div align="center" class="Tnc">Uploading an inappropriate Profile
Image will cause your Account to be permanently banned.</div>
            </li>
        </ul>
    </article>
</div>
</section>
</div>
</div>
<div class="body8">
    <div class="body9">
        <div class="main">
            <footer>
                <div class="col_1">
                    <h3 align="center" class="MRule">ONLY ONE RULE</h3>
                    <ul class="list3">
                        <li>After Installing MOLE Please Pass it on to your colleagues
                            or to your school <span class="free">freely</span>.</li>
                        <li>
                            <div align="center" class="greedQ">Never be Greedy or Selfish
                            Share with Others</div>
                            </li>
                        </ul>
                    </div>
                    <div class="col_2 pad_left1">
                        <h3 align="center">MOLE Team Members</h3>
                        <span class="botL">MOLE Concept,Development all done by geniuses
below,</span>
                        <div id="MTMI_panel">
                            <div id="close_P"><a href="#close" onClick="showP()></a></div>
                            <div class="showPTC" id="fnameL1"></div>
                            <div class="showPTC" id="fnameL2"></div>
                            <div class="showPTC" id="eAddress"></div>
                            <div class="showPTC" id="age"></div>
                            <div class="showPTC" id="abtM"></div>
                            <div id="Cil"></div>
                        </div>
                    </div>
                </div>
            </footer>
        </div>
    </div>
</div>

```

```

        </div>
        <script type="text/javascript">
>document.getElementById("MTMI_panel").style.display = 'none';setV();</script>
<div class="wrapper">
    <ul class="list3 col_1">
        <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/> Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
        <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga', 'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong> <br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha Samarasekara</strong></a></li>
        <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara', 'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong> <br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
    </ul>
    <ul class="list3 col_1 pad_left1">
        <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake', 'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna Aravinda</strong></a></li>
        <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya', 'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong> <br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga Weerasuriya</strong></a></li>
    </ul>
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <strong><a href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
    <p class="center"><a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license" href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>. </span></p>
    </div>
</div>
</div>
</div class="botc"></div>
</body>
</html>

```

2. personalData.php

```
<?php
if(isset($_GET['u'])){
    include("ConnectMe2.php");
    $u = $_GET['u'];
    $records = array();
    $records[0] = details("fname", "userpersonal", "username = '$u'");
    $records[1] = details("lname", "userpersonal", "username = '$u'");
    $records[2] = details("sex", "userpersonal", "username = '$u'");
    $records[3] = details("sname", "userpersonal", "username = '$u'");
    $records[4] = details("dob", "userpersonal", "username = '$u')");
    echo "Status = 1";
    echo "<br/>";
    echo "F = $records[0]";
    echo "<br/>";
    echo "L = $records[1]";
    echo "<br/>";
    echo "S = $records[2]";
    echo "<br/>";
    echo "Sch = $records[3]";
    echo "<br/>";
    echo "D = $records[4]";
}
else{
    echo "Status = 0";
}

function details($info, $tb, $st){
    $query = "select $info from $tb where $st";
    $query = mysql_query($query);
    return mysql_result($query, 0, $info);
}
?>
```

3. profile.js

```
//Coded by Basura Ratnayake
//Copyright MOLE team, all rights reserved.

//Show Profile Details in API Tag
var fields = new Array();
var fnames = Array("fn", "ln", "sn", "dn", "pn", "email1", "uname1");
function setV(){
    for(i=0;i<7;i++){
        document.getElementById(fnames[i]).value=fields[i];
    }
    document.getElementById("pcn").value=fields[4];
}
function hideV(){
    document.getElementById("pvalues").style.display = 'none';
    document.getElementById("chngP").style.display = 'none';
    document.getElementById("pvalues1").style.display = 'none';
}

//Validate Real Controls
var fieldsK = new Boolean(true);
var Enames = Array ("fname", "lname", "sname", "pass", "passC");
var ERNames = Array ("First Name", "Last Name", "School Name", "Password", "Confirm Password");
var INames = Array ("fs", "ls", "ss", "ps", "cps");
var imgs="" , msg="";

function SetStatusM(a, b, c){
    document.getElementById(a).setAttribute("src", b);
    document.getElementById(a).setAttribute("title", c);
}
function CheckFLS(cName, name, RealN, val){
    if(cName == name){
        var EleN = document.getElementById(cName);
        var testV = val.test(EleN.value);
        if(testV){
            msg = "Entered " + RealN + " is Correct.";
            imgs = "Images_Settings/k.png";
        }else{
            msg = "Entered " + RealN + " is invalid, Please Your Correct " +
RealN;
            imgs = "Images_Settings/no.png";
            fieldsK = false;
        }
    }
}
function passCon(){
    var pass = document.getElementById("pass").value;
    var passc = document.getElementById("passC").value;
    if(passc == pass){
        msg="Password Confirmed.";
        imgs="Images_Settings/k.png";
    }else{
        msg="Password Confirmation doesn't Match the Password.";
        imgs="Images_Settings/no.png";
        fieldsK = false;
    }
}
```

```

        }
        SetStatusM("cps", imgs, msg);
    }
    function Check4Blanks(cName, RealN, imgN){
        var EleN = document.getElementById(cName);
        if(EleN.value){
            msg = "Entered " + RealN + " is Correct.";
            imgs = "Images_Settings/k.png";
            if(cName == "pass"){
                var passV = /^[a-zA-Z]{5,25}$/.test(EleN.value);
                if(passV){
                    passCon();
                }else{
                    msg = "Entered Password is invalid, Please Enter a Password
with atleast 5 Letter/Numbers.";
                    imgs = "Images_Settings/no.png";
                    fieldsK = false;
                }
            }else if(cName == "uname"){
                var userV = /^[a-zA-Z_-]{6,65}$/.test(EleN.value);
                if(userV){
                    msg = "Entered " + RealN + " is Correct.";
                    imgs = "Images_Settings/k.png";
                }else{
                    msg = "Entered Username is invalid, Please Enter a Username
with atleast 6 Letter/Numbers or -";
                    imgs = "Images_Settings/no.png";
                    fieldsK = false;
                }
            }
            CheckFLS(cName, "fname", RealN, /^[a-zA-Z]{5,30}$/);
            CheckFLS(cName, "lname", RealN, /^[a-zA-Z ]{6,30}$/);
            CheckFLS(cName, "sname", RealN, /^[a-zA-Z ]{10,60}$/);
        }else{
            EleN.focus();
            msg = RealN + " Cannot be Blank, Please Enter your " + RealN;
            imgs = "Images_Settings/no.png";
            fieldsK = false;
        }
        SetStatusM(imgN, imgs, msg);
    }
    function CheckDOB(){
        var dob = document.getElementById("dob");
        if(dob.value == ""){
            msg = "Date of Birth Cannot be Blank, Please Enter your Date of Birth";
            imgs = "Images_Settings/no.png";
            fieldsK = false;
        }else{
            dob.value = dob.value.replace(".", "-", "g");
            dob.value = dob.value.replace(",", "-", "g");
            dob.value = dob.value.replace("/", "-", "g");
            var dobS = new Array();
            dobS = dob.value.split("-");
            if(dobS[0] > 1990 && dobS[0] < 2016){
                if(dobS[1] > 0 && dobS[1] < 13){
                    if(dobS[2] > 0 && dobS[2] < 32){
                        msg = "Entered Date of Birth is Okay";
                        imgs = "Images_Settings/k.png";
                    }
                }
            }
        }
    }
}

```

```

                fieldsK = true;
            }else{
                msg = "Entered Date of Birth is incorrent, Please Enter
the Date of Birth in the Format YYYY/MM/DD";
                imgs = "Images_Settings/no.png";
                fieldsK = false;
            }
        }else{
            msg = "Entered Date of Birth is incorrent, Please Enter the
Date of Birth in the Format YYYY/MM/DD";
            imgs = "Images_Settings/no.png";fieldsK = false;
        }
    }else{
        msg = "Entered Date of Birth is incorrent, Please Enter the Date of
Birth in the Format YYYY/MM/DD";
        imgs = "Images_Settings/no.png";
        fieldsK = false;
    }
}
SetStatusM("ds", imgs, msg);
}
function Validate(){
    var KStatus = new Boolean(true);
    CheckDOB();
    KStatus = fieldsK;
    for(i=0; i<4; i++){
        Check4Blanks(Enames[i], ERNames[i], INames[i]);
    }
    if(KStatus == true && fieldsK == true)
        fieldsK = true;
    else
        fieldsK = false;
    return fieldsK;
}

```

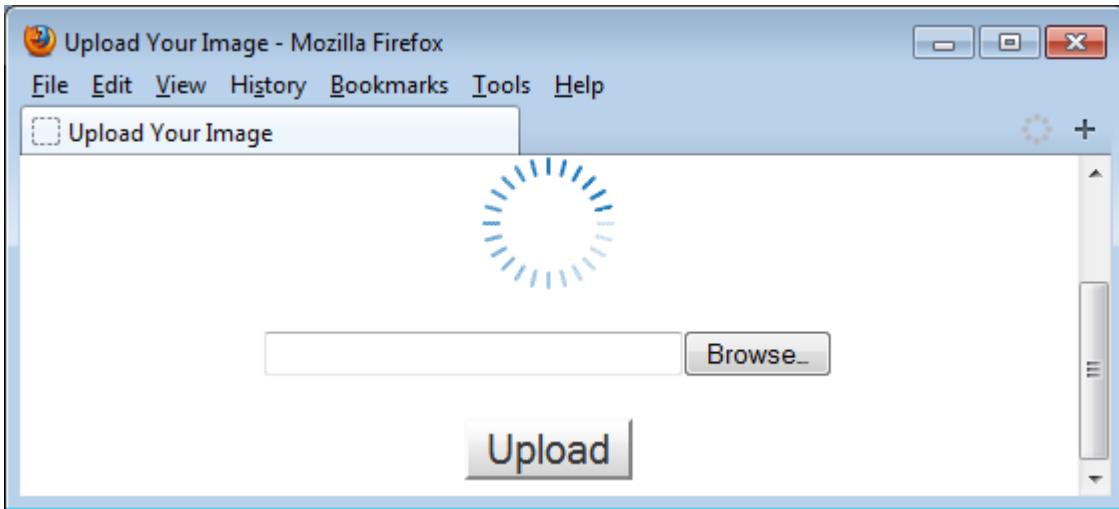
4. TemplateControl.js

```

//Coded by Basura Ratnayake
//Copyright MOLE team, all rights reserved.
function preloadImages(imgs){var picArr = [];for (i = 0; i<imgs.length; i++){picArr[i]=  
new Image(100,100);picArr[i].src=imgs[i];}}function showP(fL1, fL2, eAdd, age, aM,  
Ci){var panelS=document.getElementById("MTMI_panel");if (panelS.style.display === "none"  
{  
panelS.style.display = "block";}else{panelS.style.display = "none";}  
var fivalue = Array  
(fL1, fL2, eAdd, age, aM);var finames = Array ("fnameL1", "fnameL2", "eAddress", "age",  
"abtM");for(i=0; i<5; i++){var fid = document.getElementById(finames[i]);fid.innerHTML =  
fivalue[i];}document.getElementById("Cil").style.background = "url(" + Ci + ")";}

```

ix. Image Uploader



1. uLoadP.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>Upload Your Image</title>
<script type="text/javascript">
function val(){
    if(document.uImage.uimg.value == ""){
        alert("Select an Image to Upload");
        return false;
    }else{
        return true;
    }
}
</script>
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<style type="text/css">
.inputB {
    background-image: url(Images_Settings/input2.png);
}
body{
background-color:#FFFFFF;
}
.style1 {color: #990000;
display:block;
}
</style>
<?php
if(isset($_GET['isent'])){
$username = $_GET['isent'];
$name = $_FILES['uimg']['name'];
$size = $_FILES['uimg']['size'];

```

```

$type = $_FILES['uimg']['type'];
$temp = $_FILES['uimg']['tmp_name'];
$err = $_FILES['uimg']['error'];
$loc = "students/";
$k = 1;
$allowedImageTypes = array(
"image/pjpeg","image/jpeg","image/jpg","image/png","image/x-png","image/gif");
if ($size > 137200){
    echo "<script type='text/javascript'>alert('Upload only Images less than
150KB');</script>";
    $k = 0;
}
if(!in_array($type, $allowedImageTypes)){
    echo "<script type='text/javascript'>alert('Upload only
Images(.png,.jpg,.gif)');</script>";
    $k = 0;
}
if($k == 1){
    if(move_uploaded_file($temp, $loc.$username)){
        echo "<script type='text/javascript'>alert('Your Image
Uploaded/Changed');window.close();</script>";
    }else{
        echo "<script type='text/javascript'>alert('There was a Problem
in Uploading');</script>";
    }
}
?>
</head>

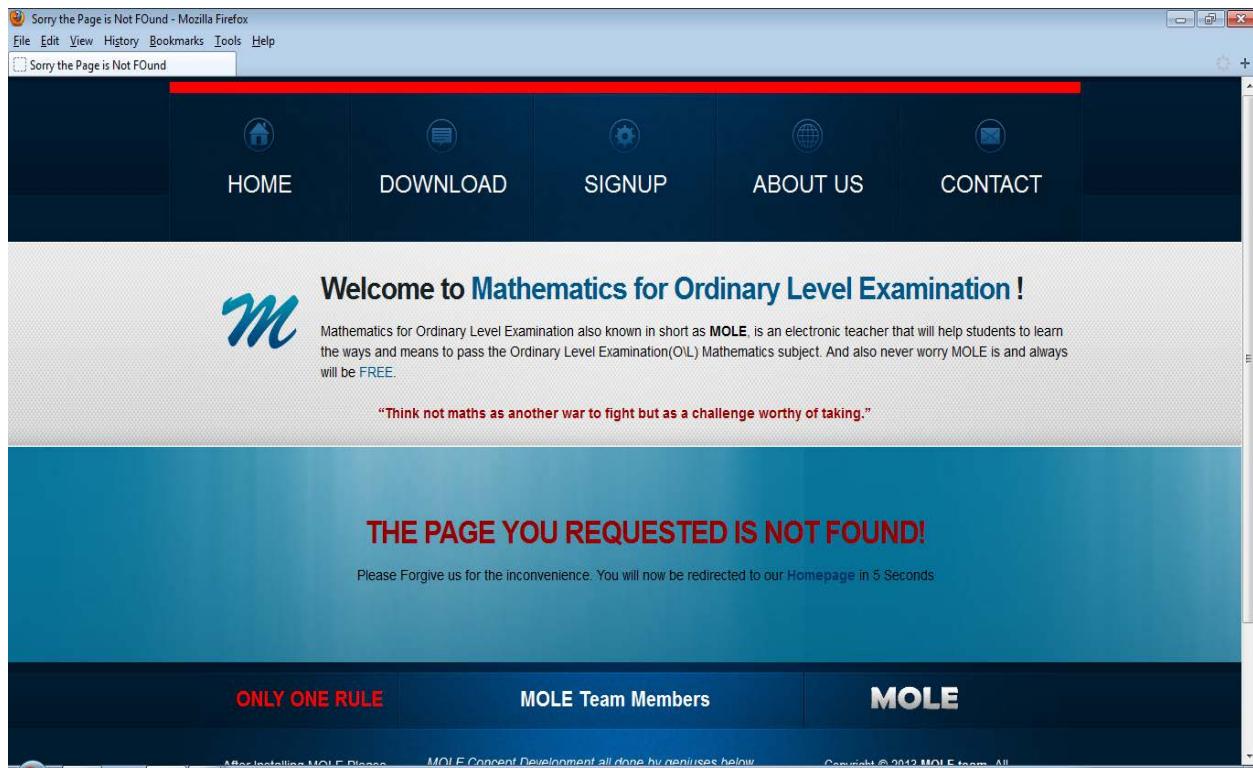
<body>
<div class="style1" id="loadimg">
    <div align="center"></div>
</div><br />
<form name="uImage" method="post" enctype="multipart/form-data"
action="uLoadP.php?isent=<?php echo $_GET['uk'];?>" onsubmit="return(val())">
    <div align="center">
        <input name="uimg" type="file" class="inputB" size="30" />
        <br />
        <br />
        <input type="submit" class="button" value="Upload" />
    </div>
</form>
</body>
</html>

```

2. uLp.php

```
<?php
$us = $_GET['u'];
$loc = "students/".$us;
echo "username = $loc";
if(copy('Images_Settings/female.png', $loc)){
echo "k";
}
?>
```

x. Page Not Found



1. page-not-found.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Sorry the Page is Not FOund</title>
<meta charset="utf-8">
<link rel="stylesheet" href="Images_Settings/reset.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/layout.css" type="text/css" media="all">
<link rel="stylesheet" href="Images_Settings/style.css" type="text/css" media="all">
<script type="text/javascript" src="Images_Settings/TemplateControl.js"></script>
<script type="text/javascript" src="Images_Settings/RegMe/mainControl.js"></script>
<script type="text/javascript">
preloadImages(['Images_Settings/menu1_active.gif',
'Images_Settings/menu2_active.gif', 'Images_Settings/menu3_active.gif',
'Images_Settings/menu4_active.gif', 'Images_Settings/menu5_active.gif']);
</script>
<style type="text/css">
.style3 {
    font-size: 16px;
    font-weight: bold;
}
.style5 {color: #005788}
.style11 {
```

```

        color: #003366
    }
a:link {
    text-decoration: none;
}
a:visited {
    text-decoration: none;
}
a:hover {
    text-decoration: underline;
}
a:active {
    text-decoration: none;
}
#confirmMk {
    position:absolute;
    width:643px;
    height:115px;
    z-index:1;
    left: 201px;
    top: 39px;
    visibility: visible;
}
#confirmMn {
    position:absolute;
    width:548px;
    height:115px;
    z-index:1;
    left: 236px;
    top: 18px;
    visibility: hidden;
}

.style13 {color: #990000}
.style23 {font-size: 13px}
.style24 {font-size: 11px}
</style>
<meta http-equiv="refresh" content="4;url=index">
</head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
</head>
<body id="page5">
<div class="body1">
    <div class="body2">
        <div class="main">
            <nav id="menu">
                <ul>
                    <li class="nav1"><a href="http://mole.loomhost.com">Home</a></li>
                    <li class="nav2"><a href="download">Download</a></li>
                    <li class="nav3"><a
href="StudentSignup?Ustatus=0&Estatus=0">Signup</a></li>
                        <li class="nav4"><a href="about">About us</a></li>
                        <li class="nav5"><a href="contact">Contact</a></li>
                </ul>
            </nav>
        </div>
    </div>
</body>

```

```

        </div>
    </div>
</div>
<div class="body5">
    <div class="body6">
        <div class="main">
            <div class="wrapper">
                <figure class="left"></figure>
                <h2>Welcome to <span class="style5">Mathematics for Ordinary Level Examination</span> !</h2>
                <blockquote>
                    <blockquote>
                        <p>Mathematics for Ordinary Level Examination also known in short as <span class="showPTC"><strong>MOLE</strong></span>, is an electronic teacher that will help students to learn the ways and means to pass the Ordinary Level Examination(O\L) Mathematics subject. And also never worry MOLE is and always will be<span class="style5"> FREE</span>.</p>
                        <p align="center"><span class="Mquote">“&#8220;Think not maths as another war to fight but as a challenge worthy of taking.&#8221;</span></p>
                    </blockquote>
                    </blockquote>
                </div>
            </div>
        </div>
    </div>
</div>
<div class="body7">
    <div class="main">
        <section id="content">
            <div class="wrapper">
                <p>&nbsp;</p>
                <article class="col2">
                    <div class="pad1">
                        <div id="confirmMk">
                            <h2 align="center"><span class="style11 style13">THE PAGE YOU REQUESTED IS NOT FOUND!</span></h2>
                            <p align="center">Please Forgive us for the inconvenience. You will now be redirected to our <strong><span class="style11"><a href="index"><span class="style11">Homepage</span></a></span></strong> in 5 Seconds</p>
                        </div>
                        <p>&nbsp;</p>
                        <p>&nbsp;</p>
                        <p>&nbsp;</p>
                        <p>&nbsp;</p>
                    </div>
                </article>
            </div>
        </section>
    </div>
</div>
<div class="body8">
    <div class="body9">
        <div class="main">
            <footer>
                <div class="col_1">

```

```

<h3 align="center" class="MRule">ONLY ONE RULE</h3>
<ul class="list3">
    <li>After Installing MOLE Please Pass it on to your colleagues
        or to your school <span class="free">freely</span>.</li>
    <li>
        <div align="center" class="greedQ">Never be Greedy or Selfish
        Share with Others</div>
    </li>
</ul>
</div>
<div class="col_2 pad_left1">
    <h3 align="center">MOLE Team Members</h3>
    <span class="botL">MOLE Concept,Development all done by geniuses
below,</span>
    <div id="MTMI_panel">
        <div id="close_P"><a href="#close" onClick="showP()"></a></div>
        <div class="showPTC" id="fnameL1"></div>
        <div class="showPTC" id="fnameL2"></div>
        <div class="showPTC" id="eAddress"></div>
        <div class="showPTC" id="age"></div>
        <div class="showPTC" id="abtM"></div>
        <div id="Cil"></div>
    </div>
    <script type="text/javascript" >
        document.getElementById("MTMI_panel").style.display = 'none';
    </script>
<div class="wrapper">
    <ul class="list3 col_1">
        <li><a href="#Basura" onClick="showP('Kahada Basura Namal', 'Bandara
Ratnayake', 'amuthupuwath@gmail.com', '20', '<strong>MOLE Team Leader</strong> <br/>
Likes to be happy and tryout new technologies to make my country great and proud.', 'male.png')"><strong>Basura Ratnayake</strong></a></li>
        <li><a href="#Visuddha" onClick="showP('Visuddha Viduranga',
'Samarasekara', 'svisuddha@ymail.com', '20', '<strong>MOLE Graphic Designer</strong>
<br/> Likes to play games, watch movies, listen to music.', 'male.png')"><strong>Visuddha
Samarasekara</strong></a></li>
        <li><a href="#Punarjeewa" onClick="showP('Punarjeewa', 'Abesekara',
'punarjeewa_85@yahoo.com', '20', '<strong>MOLE Assistant Lesson Designer</strong>
<br/> Likes to read books, and increase my knowledge.', 'male.png')"><strong>Punarjeewa Abesekara</strong></a></li>
    </ul>
    <ul class="list3 col_1 pad_left1">
        <li><a href="#Nipuna" onClick="showP('Nipuna Aravinda', 'Ratnayake',
'narat174@gmail.com', '20', '<strong>MOLE Lead Lesson Designer</strong> <br/> Likes
to read books and novels to increase my writing skill.', 'male.png')"><strong>Nipuna
Aravinda</strong></a></li>
        <li><a href="#Prasanga" onClick="showP('Prasanga', 'Weerasuriya',
'prasangaweerasooriya@gmail.com', '20', '<strong>MOLE Assistant Web Designer</strong>
<br/> Likes to be in tension and enjoy the life.', 'male.png')"><strong>Prasanga
Weerasuriya</strong></a></li>
    </ul>
</div>

```

```
</div>
<div class="col_3"> <a href="index.html" id="footer_logo" title="Mathematics
for Ordinary Level Examination">First</a>
    <p class="center style23">Copyright © 2013 <strong><a
href="about.html">MOLE team</a></strong>, All Rights Reserved.</p>
    <p class="center"><a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US"></a><br />
        <span class="style24">This work is licensed under a <a rel="license"
href="http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US">Creative Commons
Attribution-NonCommercial-NoDerivs 3.0 Unported License</a>.</span></p>
    </div>
    </footer>
</div>
</div>
<div class="botc"></div>
</body>
</html>
```

xi. Friend Management

The following pages are for sending and managing User Friend information of the Software when Online.

1. adReFriend.php

```
<?php
if(isset($_GET['u']) && isset($_GET['f']) && isset($_GET['fun'])){
    include("ConnectMe2.php");
    $u = $_GET['u'];
    $f = $_GET['f'];
    $fun = $_GET['fun'];
    if($fun == "A"){
        $query = "INSERT INTO friends VALUES('$f', '$u', 'Y')";
        mysql_query($query);
        $query = "UPDATE friends SET confirm = 'Y' WHERE username = '$u' AND friend = '$f'";
    }else{
        $query = "DELETE FROM friends WHERE username = '$f' AND friend = '$u'";
        mysql_query($query);
        $query = "DELETE FROM friends WHERE username = '$u' AND friend = '$f'";
    }
    mysql_query($query);
}
?>
```

2. displayF.php

```
<?php
if(isset($_GET['u'])){
    include("ConnectMe2.php");
    $u = $_GET['u'];
    $fonline;
    $query = mysql_query("select * from friends where username='$u' AND confirm ='Y'");
    $TP = mysql_num_rows($query);
    echo "CF = $TP";
    echo "<br/>";
    $query = mysql_query("select * from friends where username='$u' AND confirm ='N'");
    $TP = mysql_num_rows($query);
    echo "UCF = $TP";
    echo "<br/>";
    $query = mysql_query("select * from friends where username='$u'");
    while($row = mysql_fetch_array($query)){
        $result = $row['friend'];
        echo "FUser = $result";
        echo "<br/>";
        $result = $row['confirm'];
        echo "Confirm = $result";
        echo "<br/>";
    }
}
```

```

        $result = $row['friend'];
        $fonline = details("online", "friendchat", "username='$result'");
        echo "FON = $fonline";
        echo "<br/>";
    }
}

function details($info, $tb, $st){
    $query = "select $info from $tb where $st";
    $query = mysql_query($query);
    return mysql_result($query, 0, $info);
}
?>

```

3. friend.php

```

<?php
if(isset($_GET['u']) && isset($_GET['f'])){
    include("ConnectMe2.php");
    $u = $_GET['u'];
    $f = $_GET['f'];
    $records = array();
    $records[0] = mysql_num_rows(mysql_query("select username from userinfo where
username = '$f'"));
    if($records[0] == 1){
        echo "FExist = 1";
        echo "<br/>";
        $records[0] = mysql_num_rows(mysql_query("select * from friends where
username = '$u' and friend = '$f'"));
        if($records[0] == 1){
            $records[1] = details("confirm", "friends", "username = '$u' and
friend = '$f'");
            if($records[1] == "N"){
                echo "FReqs = N";
                echo "<br/>";
                echo "FUName = $f";
                echo "<br/>";
                $records[1] = details("fname", "userpersonal", "username =
'$f'");
                $records[2] = details("lname", "userpersonal", "username =
'$f'");
                echo "FName = $records[1] $records[2]";
                echo "<br/>";
                $records[2] = details("sname", "userpersonal", "username =
'$f'");
                echo "FSch = $records[2]";
                echo "<br/>";
                $records[2] = details("online", "friendchat", "username =
'$f'");
                echo "FON = $records[2]";
            }else{
                echo "FReqs = Y";
                echo "<br/>";
                echo "FUName = $f";
            }
        }
    }
}

```

```

        echo "<br/>";
        $records[1] = details("fname", "userpersonal", "username =
'$f'");
        $records[2] = details("lname", "userpersonal", "username =
'$f'");
        echo "FName = $records[1] $records[2]";
        echo "<br/>";
        $records[2] = details("sname", "userpersonal", "username =
'$f'");
        echo "FSch = $records[2]";
        echo "<br/>";
        $records[2] = details("online", "friendchat", "username =
'$f'");
        echo "FON = $records[2]";
    }
}else{
    echo "FReqs = NOT";
    echo "<br/>";
    echo "FUName = $f";
    echo "<br/>";
    $records[1] = details("fname", "userpersonal", "username =
'$f'");
    $records[2] = details("lname", "userpersonal", "username =
'$f'");
    echo "FName = $records[1] $records[2]";
    echo "<br/>";
    $records[2] = details("sname", "userpersonal", "username =
'$f'");
    echo "FSch = $records[2]";
    echo "<br/>";
    $records[2] = details("online", "friendchat", "username = '$f'");
    echo "FON = $records[2]";
}
}else{
    echo "FExist = 0";
}
}

function details($info, $tb, $st){
    $query = "select $info from $tb where $st";
    $query = mysql_query($query);
    return mysql_result($query, 0, $info);
}
?>

```

4. friendAdd.php

```

<?php
if(isset($_GET['u']) && isset($_GET['f'])){
    include("ConnectMe2.php");
    $u = $_GET['u'];
    $f = $_GET['f'];
    $query = "INSERT INTO friends VALUES('$f', '$u', 'N')";
    mysql_query($query);?>

```

xii. Examination Results Management

The following pages are used to retrieve and manage Exam Result Statuses from the Software when Online.

1. examData.php

```
<?php
if(isset($_GET['u'])){
    include("ConnectMe2.php");
    $u = $_GET['u'];
    $query = mysql_query("select status from examprogress where username='$u' AND
status ='P'");
    $TP = mysql_num_rows($query);
    $query = mysql_query("select status from examprogress where username='$u' AND
status ='F'");
    $TF = mysql_num_rows($query);
    $query = mysql_query("select * from examprogress where username='$u'");
    echo "TP = $TP";
    echo "<br/>";
    echo "TF = $TF";
    echo "<br/>";
    $result="";
    while($row = mysql_fetch_array($query)){
        $result = $row['examName'];
        echo "Name = $result";
        echo "<br/>";
        $result = $row['marksC'];
        echo "CMark = $result";
        echo "<br/>";
        $result = $row['marksL'];
        echo "LMark = $result";
        echo "<br/>";
        $result = $row['status'];
        echo "Status = $result";
        echo "<br/>";
    }
}
function details($info, $tb, $st){
    $query = "select $info from $tb where $st";
    $query = mysql_query($query);
    return mysql_result($query, 0, $info);
}
?>
```

2. examS R.php

```
<?php include("ConnectMe2.php");
$u;
$e;
if(isset($_GET['u']) && isset($_GET['e'])){
    $u = $_GET['u'];
    $e = $_GET['e'];
    $query = mysql_query("select username from examprogress where username = '$u'
and examname = '$e'");
    if(mysql_num_rows($query) == 0){
        echo "CMark = 0";
        echo "<br/>";
        echo "LMark = 0";
    }else{
        $result = details('marksC','examprogress',"username='$u' AND examName
='$e'");
        echo "CMark = $result";
        echo "<br/>";
        $result = details('marksL','examprogress',"username='$u' AND examName
='$e'");
        echo "LMark = $result";
    }
}
if(isset($_GET['I'])){
$query="";
$num =$_GET['I'];
$c = $_GET['cm'];
$l = $_GET['lm'];
$s = $_GET['s'];
if($num == 1){
    $query = "INSERT INTO examprogress VALUES(null, '$u', '$e', '$c', '$l',
'$s')";
}else{
    $query = "UPDATE examprogress SET marksC ='$c', marksL='$l', status='$s'
WHERE username = '$u' and examname = '$e'";
}
mysql_query($query);
}

function details($info, $tb, $st){
    $query = "select $info from $tb where $st";
    $query = mysql_query($query);
    return mysql_result($query, 0, $info);
}
?>
```

c) Database

The Database is used to store and retrieve User Account Information and Lesson Completion Statuses, sent and used by the Software and the Website. These are the mySQL queries used to design the 2 tables of the Database, to which data could be readily added.

i. examNames.sql

```
USE mstudents;

INSERT INTO exams
VALUES (1, "Binomial Expressions");
INSERT INTO exams
VALUES (2, "Graphs");
INSERT INTO exams
VALUES (3, "Indices and Logarithms");
INSERT INTO exams
VALUES (4, "Probability");
INSERT INTO exams
VALUES (5, "Sets");
INSERT INTO exams
VALUES (6, "Percentages");
INSERT INTO exams
VALUES (7, "Business and Shares");
INSERT INTO exams
VALUES (8, "Square Root");
INSERT INTO exams
VALUES (9, "Perimeter");
INSERT INTO exams
VALUES (10, "Representation of Data");
INSERT INTO exams
VALUES (11, "Arithmetic Progressions");
INSERT INTO exams
VALUES (12, "Geometric Progressions");
INSERT INTO exams
VALUES (13, "Matrices");
INSERT INTO exams
VALUES (14, "Parallelograms");
INSERT INTO exams
VALUES (15, "Area of Rectilinear Plane Figures between Parallel Lines");
INSERT INTO exams
VALUES (16, "Number Bases");
INSERT INTO exams
VALUES (17, "Equations");
INSERT INTO exams
VALUES (18, "Area");
INSERT INTO exams
VALUES (19, "Surface Area of Solid Figures");
INSERT INTO exams
VALUES (20, "Volume of Solids");
INSERT INTO exams
VALUES (21, "Taxes and Insurances");
INSERT INTO exams
VALUES (22, "Scale Diagrams");
```

```
INSERT INTO exams
VALUES (23, "Formulae");
INSERT INTO exams
VALUES (24, "Tangents");
INSERT INTO exams
VALUES (25, "Fractions");
INSERT INTO exams
VALUES (26, "Rational Numbers");
INSERT INTO exams
VALUES (27, "Least Common Multiple");
INSERT INTO exams
VALUES (28, "Ratio");
INSERT INTO exams
VALUES (29, "Algebraic Fractions");
INSERT INTO exams
VALUES (30, "Speed");
INSERT INTO exams
VALUES (31, "Algebraic Inequalities");
INSERT INTO exams
VALUES (32, "Quadratic Equations");
INSERT INTO exams
VALUES (33, "Real Numbers");
INSERT INTO exams
VALUES (34, "Factors of Quadratic Expressions");
INSERT INTO exams
VALUES (35, "Trigonometry");
INSERT INTO exams
VALUES (36, "Constructions");
INSERT INTO exams
VALUES (37, "Cyclic Quadrilaterals");
INSERT INTO exams
VALUES (38, "Pythagoras Theorem");
INSERT INTO exams
VALUES (39, "Mid Point Theorem");
INSERT INTO exams
VALUES (40, "Equi-Angular Triangles");
INSERT INTO exams
VALUES (41, "Chords of a Circle");
INSERT INTO exams
VALUES (42, "Angles in a Circle");
INSERT INTO exams
VALUES (43, "Congruency");
INSERT INTO exams
VALUES (44, "Triangles");
```

ii. mainDB.sql

```
CREATE DATABASE mstud;
USE mstud;

CREATE TABLE temps(
    scode          VARCHAR(65) NOT NULL,
    username       VARCHAR(65) NOT NULL,
    password       VARCHAR(25) NOT NULL,
    email          VARCHAR(65) NOT NULL,
    fname          VARCHAR(30) NOT NULL,
    lname          VARCHAR(30) NOT NULL,
    sex            VARCHAR(1)   NOT NULL,
    sname          VARCHAR(60) NOT NULL,
    dob            DATE        NOT NULL,
    PRIMARY KEY (scode));

CREATE TABLE downcount(
    dno           INT NOT NULL AUTO_INCREMENT,
    total         INT(5) NOT NULL,
    PRIMARY KEY (dno));

CREATE TABLE userinfo(
    uno           INT NOT NULL AUTO_INCREMENT,
    username      VARCHAR(65) NOT NULL,
    password      VARCHAR(25) NOT NULL,
    email          VARCHAR(65) NOT NULL,
    PRIMARY KEY (uno, username));
ALTER TABLE `userinfo` ADD INDEX(`username`);

CREATE TABLE userpersonal(
    username      VARCHAR(65) NOT NULL,
    fname          VARCHAR(30) NOT NULL,
    lname          VARCHAR(30) NOT NULL,
    sex            VARCHAR(1)   NOT NULL,
    sname          VARCHAR(60) NOT NULL,
    dob            DATE        NOT NULL,
    friendR        INT(2),
    PRIMARY KEY (username),
    FOREIGN KEY (username) REFERENCES userinfo(username));

CREATE TABLE examprogress(
    eNo           INT NOT NULL AUTO_INCREMENT,
    username      VARCHAR(65) NOT NULL,
    examName      VARCHAR(10)  NOT NULL,
    marksC        INT(3)      NOT NULL,
    marksL        INT(3)      NOT NULL,
    status         VARCHAR(1)  NOT NULL,
    PRIMARY KEY(eNo),
    FOREIGN KEY (username) REFERENCES userinfo (username));

CREATE TABLE friends(
    username       VARCHAR(65) NOT NULL,
    friend         VARCHAR(65) NOT NULL,
    confirm        VARCHAR(1)   NOT NULL,
    PRIMARY KEY(username, friend),
    FOREIGN KEY (username) REFERENCES userinfo(username));
```

```
CREATE TABLE friendchat(
    username          VARCHAR(65) NOT NULL,
    online            VARCHAR(1)   NOT NULL,
    Primary KEY (username),
    FOREIGN KEY (username) REFERENCES userinfo(username));
```

