//==================================================

program kontrProj;

uses

 Forms,

 MainUnit in 'MainUnit.pas' {Form1},

 InputUnit in 'InputUnit.pas' {InputForm},

 UnitResult in 'UnitResult.pas' {ResultForm},

 AboutUnit in 'AboutUnit.pas' {AboutForm};

{$R \*.res}

begin

 Application.Initialize;

 Application.CreateForm(TForm1, Form1);

 Application.CreateForm(TInputForm, InputForm);

 Application.CreateForm(TResultForm, ResultForm);

 Application.CreateForm(TAboutForm, AboutForm);

 Application.Run;

end.

//=====================================================

unit MainUnit;

interface

uses

 Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,

 Dialogs, StdCtrls, InputUnit, UnitResult, AboutUnit;

type

 TForm1 = class(TForm)

 inputBtn: TButton;

 CalcBtn: TButton;

 ExitBtn: TButton;

 AboutBtn: TButton;

 procedure inputBtnClick(Sender: TObject);

 procedure CalcBtnClick(Sender: TObject);

 procedure ExitBtnClick(Sender: TObject);

 procedure AboutBtnClick(Sender: TObject);

 private

 { Private declarations }

 public

 { Public declarations }

 end;

var

 Form1: TForm1;

 R,S,A,B,X:real;

implementation

{$R \*.dfm}

procedure TForm1.inputBtnClick(Sender: TObject);

begin

 inputForm.Visible:=true;

end;

procedure TForm1.CalcBtnClick(Sender: TObject);

begin

 resultForm.Visible:=true;

end;

procedure TForm1.ExitBtnClick(Sender: TObject);

var

 buttonSelected:integer;

begin

buttonSelected := MessageDlg('Выйти из программы?',mtCustom,

 [mbOK,mbCancel], 0);

 if buttonSelected = mrOk then form1.Close;;

 if buttonSelected = mrCancel then exit;

end;

procedure TForm1.AboutBtnClick(Sender: TObject);

begin

 AboutForm.Visible:=True;

end;

end.

//===========================================================

unit UnitResult;

interface

uses

 Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,

 Dialogs, StdCtrls;

type

 TResultForm = class(TForm)

 StaticText1: TStaticText;

 procedure FormClose(Sender: TObject; var Action: TCloseAction);

 procedure FormShow(Sender: TObject);

 procedure FormKeyDown(Sender: TObject; var Key: Word;

 Shift: TShiftState);

 private

 { Private declarations }

 public

 { Public declarations }

 end;

var

 ResultForm: TResultForm;

implementation

 uses mainUnit, inPutUnit;

{$R \*.dfm}

procedure TResultForm.FormClose(Sender: TObject; var Action: TCloseAction);

begin

StaticText1.Caption:='';

end;

procedure TResultForm.FormShow(Sender: TObject);

begin

if trim(StaticText1.Caption)='' then

 begin

 StaticText1.Caption:='Введите данные для расчёта!!!'

 end;

end;

procedure TResultForm.FormKeyDown(Sender: TObject; var Key: Word;

 Shift: TShiftState);

begin

 // Выход по ESC

 if (Key = VK\_ESCAPE) then

 begin

 Key := 0;

 Close;

 end;

end;

end.

//===========================================================

unit InputUnit;

interface

uses

 Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,

 Dialogs, StdCtrls, Buttons, Math, UnitResult;

type

 TInputForm = class(TForm)

 Edit1: TEdit;

 Edit2: TEdit;

 Edit3: TEdit;

 Label1: TLabel;

 Label2: TLabel;

 Label3: TLabel;

 Label4: TLabel;

 BitBtn1: TBitBtn;

 GroupBox1: TGroupBox;

 RadioButton1: TRadioButton;

 RadioButton2: TRadioButton;

 procedure BitBtn1Click(Sender: TObject);

 procedure Edit1KeyPress(Sender: TObject; var Key: Char);

 procedure FormCreate(Sender: TObject);

 procedure FormClose(Sender: TObject; var Action: TCloseAction);

 private

 { Private declarations }

 public

 { Public declarations }

 end;

var

 InputForm: TInputForm;

implementation

uses Mainunit;

{$R \*.dfm}

procedure TInputForm.BitBtn1Click(Sender: TObject);

begin

if (trim(Edit1.Text)='') then

 begin

 MessageBox(Handle,pchar('Введите А'),pchar('Внимание!'),MB\_OK or MB\_ICONWARNING);

 windows.SetFocus(Edit1.handle);

 exit;

 end;

if (trim(Edit2.Text)='') then

 begin

 MessageBox(Handle,pchar('Введите B'),pchar('Внимание!'),MB\_OK or MB\_ICONWARNING);

 windows.SetFocus(Edit2.handle);

 exit;

 end;

if (trim(Edit3.Text)='') then

 begin

 MessageBox(Handle,pchar('Введите Х'),pchar('Внимание!'),MB\_OK or MB\_ICONWARNING);

 windows.SetFocus(Edit3.handle);

 exit;

 end;

 a:=StrToFloat(trim(Edit1.Text));

 b:=StrToFloat(trim(Edit2.Text));

 x:=StrToFloat(trim(Edit3.Text));

if RadioButton1.Checked then

 begin

 // showmessage('S');

 if b=0 then

 begin

 MessageBox(Handle,pchar('В не дролжно равнятся 0'),pchar('Внимание!'),MB\_OK or MB\_ICONWARNING);

 windows.SetFocus(Edit2.handle);

 exit;

 end;

 R:=power(x,2)\*(x+1)/b-power(sin(x+a),2);

 resultForm.StaticText1.Caption:='R='+floattostr(S);

 end;

if RadioButton2.Checked then

 begin

 if a=0 then

 begin

 MessageBox(Handle,pchar('A не дролжно равнятся 0'),pchar('Внимание!'),MB\_OK or MB\_ICONWARNING);

 windows.SetFocus(Edit1.handle);

 exit;

 end;

 if a\*b\*x<0 then

 begin

 MessageBox(Handle,pchar('Выражение x\*b/a не должно быть меньше 0'),pchar('Внимание!'),MB\_OK or MB\_ICONWARNING);

 windows.SetFocus(Edit1.handle);

 exit;

 end;

 S:=sqrt(x\*b/a)+power(cos(power(x+b,3)),2);

 resultForm.StaticText1.Caption:='S='+floattostr(R);

 end;

 InputForm.Close;

 end;

procedure TInputForm.Edit1KeyPress(Sender: TObject; var Key: Char);

begin

// могут быть только цифры,точка или запятая в зависимости от настроек

// минус, backspace

if not (key in [Decimalseparator,'0'..'9',#8,#45]) then

 begin

 key:=#0;

 exit;

 end;

end;

procedure TInputForm.FormCreate(Sender: TObject);

begin

 RadioButton1.checked:=True;

// ResultForm.StaticText1.Caption:='';

end;

procedure TInputForm.FormClose(Sender: TObject; var Action: TCloseAction);

begin

Edit1.Text:='';

Edit2.Text:='';

Edit3.Text:='';

end;

end.

//===========================================================

unit AboutUnit;

interface

uses

 Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,

 Dialogs, StdCtrls;

type

 TAboutForm = class(TForm)

 StaticText1: TStaticText;

 procedure FormKeyDown(Sender: TObject; var Key: Word;

 Shift: TShiftState);

 private

 { Private declarations }

 public

 { Public declarations }

 end;

var

 AboutForm: TAboutForm;

implementation

{$R \*.dfm}

procedure TAboutForm.FormKeyDown(Sender: TObject; var Key: Word;

 Shift: TShiftState);

begin

 // Выход по ESC

 if (Key = VK\_ESCAPE) then

 begin

 Key := 0;

 Close;

 end;

end;

end.

//===============================================================