```matlab
classdef Transformadores < matlab.apps.AppBase
    % Properties that correspond to app components
    properties (Access = public)
        ProgramacinAvanzadaDiegoVillegasGoveaUIFigure  matlab.ui.Figure
        InicioMenu                      matlab.ui.container.Menu
        ResumenMenu                     matlab.ui.container.Menu
        AcercadeMenu                    matlab.ui.container.Menu
        DedicatoriaMenu                 matlab.ui.container.Menu
        ClculodeEficienciayRegulacindeunTransformadorReductorLabel   matlab.ui.control.Label
        PUBasePanel                     matlab.ui.container.Panel
        SbEditFieldLabel                matlab.ui.control.Label
        SbEditField                     matlab.ui.control.NumericEditField
        Vb1EditFieldLabel               matlab.ui.control.Label
        Vb1EditField                    matlab.ui.control.NumericEditField
        Vb2EditFieldLabel               matlab.ui.control.Label
        Vb2EditField                    matlab.ui.control.NumericEditField
        Ib1EditFieldLabel               matlab.ui.control.Label
        Ib1EditField                    matlab.ui.control.NumericEditField
        Ib2EditFieldLabel               matlab.ui.control.Label
        Ib2EditField                    matlab.ui.control.NumericEditField
        KVALabel_3                      matlab.ui.control.Label
        ALabel_8                        matlab.ui.control.Label
        VLabel_13                       matlab.ui.control.Label
        VLabel_12                       matlab.ui.control.Label
        ALabel_9                        matlab.ui.control.Label
        DATOSDEPLACAPanel               matlab.ui.container.Panel
        RelacindetransformacinLabel     matlab.ui.control.Label
        EditFieldLabel                  matlab.ui.control.Label
        LadoDeBajaEditField             matlab.ui.control.NumericEditField
        PotenciaaparenteEditField_2Label   matlab.ui.control.Label
        PotenciaAparenteEditField       matlab.ui.control.NumericEditField
        EditField_3Label                matlab.ui.control.Label
        LadoDeAltaEditField             matlab.ui.control.NumericEditField
        FrecuenciaEditFieldLabel        matlab.ui.control.Label
        FrecuenciaEditField             matlab.ui.control.NumericEditField
        KVALabel                        matlab.ui.control.Label
        HzLabel                         matlab.ui.control.Label
        VLabel_14                       matlab.ui.control.Label
        DATOSDEPRUEBASPanel             matlab.ui.container.Panel
        LadodebajaCALabel               matlab.ui.control.Label
        LadodealtaCSLabel               matlab.ui.control.Label
        VoltajeEditFieldLabel           matlab.ui.control.Label
        VoltajeEditField                matlab.ui.control.NumericEditField
        CorrienteEditFieldLabel         matlab.ui.control.Label
        CorrienteEditField              matlab.ui.control.NumericEditField
        PotenciaEditFieldLabel          matlab.ui.control.Label
        PotenciaEditField               matlab.ui.control.NumericEditField
        CorrienteEditField_2Label       matlab.ui.control.Label
        CorrienteEditField_2            matlab.ui.control.NumericEditField
        VoltajeEditField_2Label         matlab.ui.control.Label
        VoltajeEditField_2              matlab.ui.control.NumericEditField
        PotenciaEditField_2Label        matlab.ui.control.Label
        PotenciaEditField_2             matlab.ui.control.NumericEditField
        VLabel_5                        matlab.ui.control.Label
        ALabel_5                        matlab.ui.control.Label
        WLabel_5                        matlab.ui.control.Label
        VLabel_6                        matlab.ui.control.Label
        ALabel_6                        matlab.ui.control.Label
        WLabel_6                        matlab.ui.control.Label
        CALCULOSPanel                   matlab.ui.container.Panel
        TabGroup                        matlab.ui.container.TabGroup
        VocTab                          matlab.ui.container.Tab
        VocLabel                        matlab.ui.control.Label
        Vb2Label                        matlab.ui.control.Label
        VcaLabel_2                      matlab.ui.control.Label
        Label                           matlab.ui.control.Label
        VLabel_2                        matlab.ui.control.Label
        VLabel                          matlab.ui.control.Label
        Label_4                         matlab.ui.control.Label
        EditField_Vca                   matlab.ui.control.NumericEditField
        EditField_5                     matlab.ui.control.NumericEditField
        VocLabel_3                      matlab.ui.control.Label
```

EditField_6	matlab.ui.control.NumericEditField
puLabel	matlab.ui.control.Label
IocTab	matlab.ui.container.Tab
IocLabel	matlab.ui.control.Label
Ib2Label	matlab.ui.control.Label
IcaLabel	matlab.ui.control.Label
Label_6	matlab.ui.control.Label
ALabel	matlab.ui.control.Label
ALabel_2	matlab.ui.control.Label
Label_7	matlab.ui.control.Label
EditField_7	matlab.ui.control.NumericEditField
EditField_8	matlab.ui.control.NumericEditField
IocLabel_3	matlab.ui.control.Label
EditField_9	matlab.ui.control.NumericEditField
puLabel_2	matlab.ui.control.Label
PocTab	matlab.ui.container.Tab
PocLabel	matlab.ui.control.Label
SbLabel	matlab.ui.control.Label
PcaLabel	matlab.ui.control.Label
Label_9	matlab.ui.control.Label
WLabel	matlab.ui.control.Label
WLabel_2	matlab.ui.control.Label
Label_10	matlab.ui.control.Label
EditField_10	matlab.ui.control.NumericEditField
EditField_11	matlab.ui.control.NumericEditField
PocLabel_3	matlab.ui.control.Label
EditField_12	matlab.ui.control.NumericEditField
puLabel_3	matlab.ui.control.Label
PerdidasenelncleoLabel	matlab.ui.control.Label
VscTab	matlab.ui.container.Tab
VscLabel	matlab.ui.control.Label
Vb1Label	matlab.ui.control.Label
VcsLabel	matlab.ui.control.Label
Label_12	matlab.ui.control.Label
VLabel_3	matlab.ui.control.Label
VLabel_4	matlab.ui.control.Label
Label_13	matlab.ui.control.Label
EditField_13	matlab.ui.control.NumericEditField
EditField_14	matlab.ui.control.NumericEditField
VscLabel_3	matlab.ui.control.Label
EditField_15	matlab.ui.control.NumericEditField
puLabel_4	matlab.ui.control.Label
IscTab	matlab.ui.container.Tab
IscLabel	matlab.ui.control.Label
Ib1Label	matlab.ui.control.Label
IcsLabel	matlab.ui.control.Label
Label_15	matlab.ui.control.Label
ALabel_3	matlab.ui.control.Label
ALabel_4	matlab.ui.control.Label
Label_16	matlab.ui.control.Label
EditField_16	matlab.ui.control.NumericEditField
EditField_17	matlab.ui.control.NumericEditField
IscLabel_3	matlab.ui.control.Label
EditField_18	matlab.ui.control.NumericEditField
puLabel_5	matlab.ui.control.Label
PscTab	matlab.ui.container.Tab
PscLabel	matlab.ui.control.Label
SbLabel_2	matlab.ui.control.Label
PcsLabel	matlab.ui.control.Label
Label_18	matlab.ui.control.Label
WLabel_3	matlab.ui.control.Label
WLabel_4	matlab.ui.control.Label
Label_19	matlab.ui.control.Label
EditField_19	matlab.ui.control.NumericEditField
EditField_20	matlab.ui.control.NumericEditField
PscLabel_2	matlab.ui.control.Label
EditField_21	matlab.ui.control.NumericEditField
puLabel_6	matlab.ui.control.Label
PerdidasdelconductorLabel	matlab.ui.control.Label
YTab	matlab.ui.container.Tab
YLabel	matlab.ui.control.Label
VocLabel_2	matlab.ui.control.Label

IocLabel_2	matlab.ui.control.Label
Label_21	matlab.ui.control.Label
Label_24	matlab.ui.control.Label
Label_25	matlab.ui.control.Label
Label_22	matlab.ui.control.Label
EditField_22	matlab.ui.control.NumericEditField
EditField_23	matlab.ui.control.NumericEditField
YLabel_2	matlab.ui.control.Label
EditField_24	matlab.ui.control.NumericEditField
puLabel_7	matlab.ui.control.Label
PocTab_2	matlab.ui.container.Tab
PocVocIoccosLabel	matlab.ui.control.Label
PocLabel_2	matlab.ui.control.Label
VocIocLabel	matlab.ui.control.Label
cos1Label	matlab.ui.control.Label
Label_28	matlab.ui.control.Label
EditField_27	matlab.ui.control.NumericEditField
Label_30	matlab.ui.control.Label
cos1Label_2	matlab.ui.control.Label
EditField_28	matlab.ui.control.NumericEditField
EditField_29	matlab.ui.control.NumericEditField
Label_29	matlab.ui.control.Label
EditField_30	matlab.ui.control.NumericEditField
YTab_2	matlab.ui.container.Tab
YLabel_3	matlab.ui.control.Label
EditField_38	matlab.ui.control.NumericEditField
LLabel	matlab.ui.control.Label
EditField_39	matlab.ui.control.NumericEditField
Label_38	matlab.ui.control.Label
ZeTab	matlab.ui.container.Tab
ZeLabel	matlab.ui.control.Label
IscLabel_2	matlab.ui.control.Label
VscLabel_2	matlab.ui.control.Label
Label_31	matlab.ui.control.Label
Label_32	matlab.ui.control.Label
EditField_31	matlab.ui.control.NumericEditField
EditField_32	matlab.ui.control.NumericEditField
ZeLabel_2	matlab.ui.control.Label
EditField_33	matlab.ui.control.NumericEditField
puLabel_8	matlab.ui.control.Label
ZeTab_2	matlab.ui.container.Tab
PscVscIsccosLabel	matlab.ui.control.Label
PscLabel_3	matlab.ui.control.Label
VscIscLabel	matlab.ui.control.Label
cos1Label_3	matlab.ui.control.Label
Label_33	matlab.ui.control.Label
EditField_34	matlab.ui.control.NumericEditField
Label_34	matlab.ui.control.Label
cos1Label_4	matlab.ui.control.Label
EditField_35	matlab.ui.control.NumericEditField
EditField_36	matlab.ui.control.NumericEditField
Label_35	matlab.ui.control.Label
EditField_37	matlab.ui.control.NumericEditField
ZTab	matlab.ui.container.Tab
ZLabel	matlab.ui.control.Label
EditField_40	matlab.ui.control.NumericEditField
LLabel_2	matlab.ui.control.Label
EditField_41	matlab.ui.control.NumericEditField
Label_39	matlab.ui.control.Label
PLENACARGAPanel	matlab.ui.container.Panel
PotenciaaparenteEditFieldLabel	matlab.ui.control.Label
PotenciaaparenteEditField	matlab.ui.control.NumericEditField
FactordepotenciaEditFieldLabel	matlab.ui.control.Label
FactordepotenciaEditField	matlab.ui.control.NumericEditField
VoltajeEditField_3Label	matlab.ui.control.Label
VoltajeEditField_3	matlab.ui.control.NumericEditField
CorrienteEditField_3Label	matlab.ui.control.Label
CorrienteEditField_3	matlab.ui.control.NumericEditField
KVALabel_2	matlab.ui.control.Label
Label_40	matlab.ui.control.Label
VLabel_9	matlab.ui.control.Label
ALabel_7	matlab.ui.control.Label

```matlab
        Label_51                        matlab.ui.control.Label
        CONTROLESButtonGroup            matlab.ui.container.ButtonGroup
        LimpiarCamposSwitchLabel        matlab.ui.control.Label
        LimpiarCamposSwitch             matlab.ui.control.RockerSwitch
        CalcularButton                  matlab.ui.control.Button
        EFICIENCIAPanel                 matlab.ui.container.Panel
        Label_41                        matlab.ui.control.Label
        Label_44                        matlab.ui.control.Label
        EditField_44Label               matlab.ui.control.Label
        EditField_44                    matlab.ui.control.NumericEditField
        SFPLabel                        matlab.ui.control.Label
        SFPPcobrePncleoLabel            matlab.ui.control.Label
        Label_45                        matlab.ui.control.Label
        Label_46                        matlab.ui.control.Label
        Label_47                        matlab.ui.control.Label
        REGULACINDEVOLTAJEPanel         matlab.ui.container.Panel
        V1I2ZV2Label                    matlab.ui.control.Label
        I2Label                         matlab.ui.control.Label
        EditField_42                    matlab.ui.control.NumericEditField
        LLabel_3                        matlab.ui.control.Label
        EditField_43                    matlab.ui.control.NumericEditField
        TomandoV2Label                  matlab.ui.control.Label
        V1EditFieldLabel                matlab.ui.control.Label
        V1EditField                     matlab.ui.control.NumericEditField
        RVEditFieldLabel                matlab.ui.control.Label
        RVEditField                     matlab.ui.control.NumericEditField
        Label_43                        matlab.ui.control.Label
        VLabel_11                       matlab.ui.control.Label
        LLabel_4                        matlab.ui.control.Label
        EditField_45                    matlab.ui.control.NumericEditField
        ALabel_10                       matlab.ui.control.Label
        RegulacindeVoltajeLabel         matlab.ui.control.Label
        RegulacindeVoltajeGauge         matlab.ui.control.SemicircularGauge
        EficienciaLabel                 matlab.ui.control.Label
        EficienciaGauge                 matlab.ui.control.SemicircularGauge
        Label_48                        matlab.ui.control.Label
        Label_49                        matlab.ui.control.Label
        Label_50                        matlab.ui.control.Label
    end
    methods (Access = public)

        function myprogress1(app)
                    f = uifigure;
                    d = uiprogressdlg(f,'Title','Please Wait',...
                        'Message','Opening the application');
                    pause(.5)
                    %Datos de placa
            Q=app.PotenciaAparenteEditField.Value;
            RTa=app.LadoDeAltaEditField.Value;
            RTb=app.LadoDeBajaEditField.Value;
            F=app.FrecuenciaEditField.Value;
            %Datos de pruebas
            Vca=app.VoltajeEditField.Value;
            Ica=app.CorrienteEditField.Value;
            Pca=app.PotenciaEditField.Value;
            Vcs=app.VoltajeEditField_2.Value;
            Ics=app.CorrienteEditField_2.Value;
            Pcs=app.PotenciaEditField_2.Value;
            %Plena carga
            PQ=app.PotenciaaparenteEditField.Value;
            FP=app.FactordepotenciaEditField.Value;
            PV=app.VoltajeEditField_3.Value;
            PI=app.CorrienteEditField_3.Value;
                    %PU Base
                    Sb=1000*app.SbEditField.Value;
                    Vb1=app.Vb1EditField.Value;
                    Vb2=app.Vb2EditField.Value;
                    Ib1=app.Ib1EditField.Value;
                    Ib2=app.Ib2EditField.Value;
                    %Voc
                    app.EditField_Vca.Value=Vca;
                    app.EditField_5.Value=Vb2;
```

```matlab
Voc=Vca/Vb2;
app.EditField_6.Value=Voc;
%Ioc
app.EditField_7.Value=Ica;
app.EditField_8.Value=Ib2;
Ioc=Ica/Ib2;
app.EditField_9.Value=Ioc;
%Poc
app.EditField_10.Value=Pca;
app.EditField_11.Value=Sb;
Poc=Pca/Sb;
app.EditField_12.Value=Poc;
%Vsc
app.EditField_13.Value=Vcs;
app.EditField_14.Value=Vb1;
Vsc=Vcs/Vb1;
app.EditField_15.Value=Vsc;
%Isc
app.EditField_16.Value=Ics;
app.EditField_17.Value=Ib1;
Isc=Ics/Ib1;
app.EditField_18.Value=Isc;
%Psc
app.EditField_19.Value=Pcs;
app.EditField_20.Value=Sb;
Psc=Pcs/Sb;
app.EditField_21.Value=Psc;


%Y
app.EditField_22.Value=Ioc;
app.EditField_23.Value=Voc;
Ymag=Ioc/Voc;
app.EditField_24.Value=Ymag;
%Poc
app.EditField_28.Value=Poc;
app.EditField_29.Value=Voc;
app.EditField_30.Value=Ioc;
tetha=-acosd(Poc/(Voc*Ioc));
app.EditField_27.Value=tetha;
%Y
app.EditField_38.Value=Ymag;
app.EditField_39.Value=tetha;
%Ze
app.EditField_31.Value=Vsc;
app.EditField_32.Value=Isc;
Ze=Vsc/Isc;
app.EditField_33.Value=Ze;

app.EditField_37.Value=Isc;
app.EditField_35.Value=Psc;
app.EditField_36.Value=Vsc;
ZeTetha=acosd(Psc/(Vsc*Isc));
app.EditField_34.Value=ZeTetha;
%Z
app.EditField_40.Value=Ze;
app.EditField_41.Value=ZeTetha;



PU=PQ*1/app.SbEditField.Value;
PUV=PV*1/Vca;
PUIb2=PI*1/Ib2;

Iang=acosd(FP);
[Ireal,Iimag]=pol2cart(-Iang,PUIb2);
I2=complex(Ireal,Iimag);

app.EditField_42.Value=PUIb2;
app.EditField_43.Value=-Iang;

[Zreal,Zimag]=pol2cart(ZeTetha,Ze);
ZE=complex(Zreal,Zimag);
```

```matlab
                [PUVreal,PUVimag]=pol2cart(0,PUV);
                puv=complex(PUVreal,PUVimag);

                V1=(I2*ZE)+puv;

                [V1ang,V1mag] = cart2pol(real(V1),imag(V1));
                app.V1EditField.Value=V1mag;
                app.EditField_45.Value=V1ang*180/pi;

                R=((V1mag-PUV)/PUV)*100;
                app.RVEditField.Value=R;

                n=((FP*PU)/((FP*PU)+(Psc+Poc)))*100;

                app.EditField_44.Value=n;

                app.RegulacindeVoltajeGauge.Value=R;
                app.EficienciaGauge.Value=n;
            end

        end
        methods (Access = private)
            % Menu selected function: AcercadeMenu
            function AcercadeMenuSelected(app, event)
                message = sprintf('Desarrollado por Diego Villegas Govea el 24 de noviembre de
2018, para la materia de Programación Avanzada. \n\nEstudiante del Tecnológico Nacional de
México campus Morelia, de la carrera de  Ingeniería Eléctrica con especialidad en Sistemas
Eléctricos de Potencia.');
                uialert(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,message,'Acerca
de','Icon','success');
            end
            % Menu selected function: ResumenMenu
            function ResumenMenuSelected(app, event)
                message = sprintf('Cálculo de la Eficiencia y Regulación de Voltaje de un
transformador reductor. \n\n La impedancia es la misma en ambos devanados del transformador,
dado que no importa si es en el devanado primario o secundario.');

uialert(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,message,'Resumen','Icon','info');

            end
            % Value changed function: LimpiarCamposSwitch
            function LimpiarCamposSwitchValueChanged(app, event)
                value = app.LimpiarCamposSwitch.Value;
                %uialert(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,value,'Value
Switch','Icon','info');
                switch value
                    case 'On'

                        f = waitbar(0,'Espere porfavor...');
                        pause(.5)

                        %Datos de placa
                        app.PotenciaAparenteEditField.Value = 0;
                        app.LadoDeAltaEditField.Value = 0;
                        app.LadoDeBajaEditField.Value = 0;
                        app.FrecuenciaEditField.Value = 60;
                        %Datos de pruebas
                        app.VoltajeEditField.Value = 0;
                        app.CorrienteEditField.Value =0;
                        app.PotenciaEditField.Value =0;
                        app.VoltajeEditField_2.Value = 0;
                        app.CorrienteEditField_2.Value =0;
                        app.PotenciaEditField_2.Value =0;

                        waitbar(.33,f,'Limpiando campos');
                        pause(0.5)

                        %PU Base
                        app.SbEditField.Value=0;
                        app.Vb1EditField.Value=0;
                        app.Vb2EditField.Value=0;
```

```matlab
app.Ib1EditField.Value=0;
app.Ib2EditField.Value=0;
%Eficiencia
app.EditField_44.Value=0;
%Regulación
app.EditField_42.Value=0;
app.EditField_43.Value=0;
app.EditField_45.Value=0;
app.V1EditField.Value=0;
app.RVEditField.Value=0;
%Plena carga
app.PotenciaaparenteEditField.Value=0;
app.FactordepotenciaEditField.Value=0;
app.VoltajeEditField_3.Value=0;
app.CorrienteEditField_3.Value=0;
%Voc
app.EditField_Vca.Value=0;
app.EditField_5.Value=0;
app.EditField_6.Value=0;
%Ioc
app.EditField_7.Value=0;
app.EditField_8.Value=0;
app.EditField_9.Value=0;
%Poc
app.EditField_10.Value=0;
app.EditField_11.Value=0;
app.EditField_12.Value=0;
%Vsc
app.EditField_13.Value=0;
app.EditField_14.Value=0;
app.EditField_15.Value=0;
%Isc
app.EditField_16.Value=0;
app.EditField_17.Value=0;
app.EditField_18.Value=0;
%Psc
app.EditField_19.Value=0;
app.EditField_20.Value=0;
app.EditField_21.Value=0;

waitbar(.67,f,'Seguimos limpiando los campos');
pause(0.5)

%Y
app.EditField_22.Value=0;
app.EditField_23.Value=0;
app.EditField_24.Value=0;
%Poc
app.EditField_27.Value=0;
app.EditField_28.Value=0;
app.EditField_29.Value=0;
app.EditField_30.Value=0;
%Y
app.EditField_38.Value=0;
app.EditField_39.Value=0;
%Ze
app.EditField_31.Value=0;
app.EditField_32.Value=0;
app.IbEditId_33.Value=0;
app.EditField_34.Value=0;
app.EditField_35.Value=0;
app.EditField_36.Value=0;
app.EditField_37.Value=0;
%Z
app.EditField_40.Value=0;
app.EditField_41.Value=0;

app.RegulacindeVoltajeGauge.Value=0;
app.EficienciaGauge.Value=0;

waitbar(1,f,'Finalizando');
pause(.5)
```

```matlab
                close(f)

                app.LimpiarCamposSwitch.Value = 'Off';
            case 'Off'
        end
    end
    % Button pushed function: CalcularButton
    function CalcularButtonPushed(app, event)

        %Datos de placa
        Q=app.PotenciaAparenteEditField.Value;
        RTa=app.LadoDeAltaEditField.Value;
        RTb=app.LadoDeBajaEditField.Value;
        F=app.FrecuenciaEditField.Value;
        %Datos de pruebas
        Vca=app.VoltajeEditField.Value;
        Ica=app.CorrienteEditField.Value;
        Pca=app.PotenciaEditField.Value;
        Vcs=app.VoltajeEditField_2.Value;
        Ics=app.CorrienteEditField_2.Value;
        Pcs=app.PotenciaEditField_2.Value;
        %Plena carga
        PQ=app.PotenciaaparenteEditField.Value;
        FP=app.FactordepotenciaEditField.Value;
        PV=app.VoltajeEditField_3.Value;
        PI=app.CorrienteEditField_3.Value;
        if
(Q==0||RTa==0||RTb==0||Vca==0||Ica==0||Pca==0||Vcs==0||Ics==0||Pcs==0||PQ==0||FP==0||PV==0||P
I==0)

            message = sprintf('Datos ingresados incorrectamente, revise que no
existan campos vacíos.');

uialert(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,message,'Alerta','Icon','warning');

        else
            %PU Base
            Sb=1000*app.SbEditField.Value;
            Vb1=app.Vb1EditField.Value;
            Vb2=app.Vb2EditField.Value;
            Ib1=app.Ib1EditField.Value;
            Ib2=app.Ib2EditField.Value;
            %Voc
            app.EditField_Vca.Value=Vca;
            app.EditField_5.Value=Vb2;
            Voc=Vca/Vb2;
            app.EditField_6.Value=Voc;
            %Ioc
            app.EditField_7.Value=Ica;
            app.EditField_8.Value=Ib2;
            Ioc=Ica/Ib2;
            app.EditField_9.Value=Ioc;
            %Poc
            app.EditField_10.Value=Pca;
            app.EditField_11.Value=Sb;
            Poc=Pca/Sb;
            app.EditField_12.Value=Poc;
            %Vsc
            app.EditField_13.Value=Vcs;
            app.EditField_14.Value=Vb1;
            Vsc=Vcs/Vb1;
            app.EditField_15.Value=Vsc;
            %Isc
            app.EditField_16.Value=Ics;
            app.EditField_17.Value=Ib1;
            Isc=Ics/Ib1;
            app.EditField_18.Value=Isc;
            %Psc
            app.EditField_19.Value=Pcs;
            app.EditField_20.Value=Sb;
            Psc=Pcs/Sb;
            app.EditField_21.Value=Psc;
```

```matlab
            %Y
            app.EditField_22.Value=Ioc;
            app.EditField_23.Value=Voc;
            Ymag=Ioc/Voc;
            app.EditField_24.Value=Ymag;
            %Poc
            app.EditField_28.Value=Poc;
            app.EditField_29.Value=Voc;
            app.EditField_30.Value=Ioc;
            tetha=-acosd(Poc/(Voc*Ioc));
            app.EditField_27.Value=tetha;
            %Y
            app.EditField_38.Value=Ymag;
            app.EditField_39.Value=tetha;
            %Ze
            app.EditField_31.Value=Vsc;
            app.EditField_32.Value=Isc;
            Ze=Vsc/Isc;
            app.EditField_33.Value=Ze;

            app.EditField_37.Value=Isc;
            app.EditField_35.Value=Psc;
            app.EditField_36.Value=Vsc;
            ZeTetha=acosd(Psc/(Vsc*Isc));
            app.EditField_34.Value=ZeTetha;
            %Z
            app.EditField_40.Value=Ze;
            app.EditField_41.Value=ZeTetha;



            PU=PQ*1/app.SbEditField.Value;
            PUV=PV*1/Vca;
            PUIb2=PI*1/Ib2;

            Iang=acosd(FP);
            [Ireal,Iimag]=pol2cart(-Iang,PUIb2);
            I2=complex(Ireal,Iimag);

            app.EditField_42.Value=PUIb2;
            app.EditField_43.Value=-Iang;

            [Zreal,Zimag]=pol2cart(ZeTetha,Ze);
            ZE=complex(Zreal,Zimag);

%               [PUVreal,PUVimag]=pol2cart(0,PUV);
%               puv=complex(PUVreal,PUVimag);

            V1=(I2*ZE)+1;

            [V1ang,V1mag] = cart2pol(imag(V1),real(V1));
            app.V1EditField.Value=V1mag;
            app.EditField_45.Value=V1ang;

            R=((V1mag-PUV)/PUV)*100;
            app.RVEditField.Value=R;

            n=((FP*PU)/((FP*PU)+(Psc+Poc)))*100;

            app.EditField_44.Value=n;

            app.RegulacindeVoltajeGauge.Value=R;
            app.EficienciaGauge.Value=n;



        end

    end
    % Value changed function: PotenciaAparenteEditField
    function PotenciaAparenteEditFieldValueChanged(app, event)
        value = app.PotenciaAparenteEditField.Value;
```

```matlab
            %PU Base
            app.SbEditField.Value=value;
            app.PotenciaaparenteEditField.Value=value;
            RTb=app.LadoDeBajaEditField.Value;
            if (RTb~=0 )
                Sb=value*1000;
                app.Ib2EditField.Value=(Sb/RTb);
                app.CorrienteEditField_3.Value=(Sb/RTb);
            end

            RTa=app.LadoDeAltaEditField.Value;
            if (RTa~=0)
                Sb=value*1000;
                app.Ib1EditField.Value=(Sb/RTa);
            end
        end
        % Value changed function: LadoDeAltaEditField
        function LadoDeAltaEditFieldValueChanged(app, event)
            RTa = app.LadoDeAltaEditField.Value;
            %PU Base
            if(RTa~=0)
                Sb = app.PotenciaAparenteEditField.Value * 1000;
                app.Ib1EditField.Value=(Sb/RTa);
                app.Vb1EditField.Value=RTa;
            else
                app.Ib1EditField.Value=0;
                app.Vb1EditField.Value=0;
            end
        end
        % Value changed function: LadoDeBajaEditField
        function LadoDeBajaEditFieldValueChanged(app, event)
            RTb = app.LadoDeBajaEditField.Value;
            %PU Base
            if(RTb~=0)
                Sb = app.PotenciaAparenteEditField.Value * 1000;
                app.Ib2EditField.Value=(Sb/RTb);
                app.Vb2EditField.Value=RTb;
                app.CorrienteEditField_3.Value=(Sb/RTb);
                app.VoltajeEditField_3.Value=RTb;
            else
                app.Ib2EditField.Value=0;
                app.Vb2EditField.Value=0;
                app.CorrienteEditField_3.Value=0;
                app.VoltajeEditField_3.Value=0;
            end

        end
        % Close request function:
        % ProgramacinAvanzadaDiegoVillegasGoveaUIFigure
        function ProgramacinAvanzadaDiegoVillegasGoveaUIFigureCloseRequest(app, event)
            selection = uiconfirm(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,'¿Deseas
cerrar la aplicación?','Confirmación de cerrar','Icon','question');

%uialert(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,selection,'Alerta','Icon','warning
');

            if (strcmp(selection,'Cancel'))
            else
                delete(app)
            end

        end
        % Menu selected function: DedicatoriaMenu
        function DedicatoriaMenuSelected(app, event)
            message = sprintf('Dedico esta aplicación con mucho cariño, especialmente a Dios
que me ha dado la oportunidad y el deseo de poder hacer cada vez mis sueños una realidad,
incluyo a personas que han sido la razón de mi existir y a la vez un pilar fundamental en mi
desarrollo como profesionista, agradezco a mi familia, a mi persona especial "Cassandra
Cerpas Pardo" y por ultimo y no menos importante a mi gran amigo y hermano "Diego Ulises
Martínez Aguilar"    ');
```

```matlab
            uialert(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,message,'Dedicatoria','Icon','succe
ss');
        end
    end
    % App initialization and construction
    methods (Access = private)
        % Create UIFigure and components
        function createComponents(app)
            % Create ProgramacinAvanzadaDiegoVillegasGoveaUIFigure
            app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure = uifigure;
            app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure.Color = [0.9412 0.9412 0.9412];
            app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure.Position = [100 80 1229 632];
            app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure.Name = 'Programación Avanzada -
Diego Villegas Govea';
            app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure.CloseRequestFcn =
createCallbackFcn(app, @ProgramacinAvanzadaDiegoVillegasGoveaUIFigureCloseRequest, true);
            % Create InicioMenu
            app.InicioMenu = uimenu(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.InicioMenu.Text = 'Inicio';
            % Create ResumenMenu
            app.ResumenMenu = uimenu(app.InicioMenu);
            app.ResumenMenu.MenuSelectedFcn = createCallbackFcn(app, @ResumenMenuSelected,
true);
            app.ResumenMenu.Accelerator = 'R';
            app.ResumenMenu.Text = 'Resumen';
            % Create AcercadeMenu
            app.AcercadeMenu = uimenu(app.InicioMenu);
            app.AcercadeMenu.MenuSelectedFcn = createCallbackFcn(app, @AcercadeMenuSelected,
true);
            app.AcercadeMenu.Accelerator = 'A';
            app.AcercadeMenu.Text = 'Acerca de';
            % Create DedicatoriaMenu
            app.DedicatoriaMenu = uimenu(app.InicioMenu);
            app.DedicatoriaMenu.MenuSelectedFcn = createCallbackFcn(app,
@DedicatoriaMenuSelected, true);
            app.DedicatoriaMenu.Accelerator = 'D';
            app.DedicatoriaMenu.Text = 'Dedicatoria';
            % Create ClculodeEficienciayRegulacindeunTransformadorReductorLabel
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel =
uilabel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.BackgroundColor =
[0.502 0.502 0.502];

app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.HorizontalAlignment =
'center';
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.VerticalAlignment
= 'center';
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.FontName =
'Comfortaa';
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.FontSize = 18;
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.FontWeight =
'bold';
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.FontColor = [1 1
1];
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.Position = [1 595
1229 28];
            app.ClculodeEficienciayRegulacindeunTransformadorReductorLabel.Text = 'Cálculo de
Eficiencia y Regulación de Voltaje de un Transformador Reductor';
            % Create PUBasePanel
            app.PUBasePanel = uipanel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.PUBasePanel.ForegroundColor = [0.6392 0.0784 0.1804];
            app.PUBasePanel.TitlePosition = 'centertop';
            app.PUBasePanel.Title = 'PU Base';
            app.PUBasePanel.FontWeight = 'bold';
            app.PUBasePanel.Position = [10 44 260 149];
            % Create SbEditFieldLabel
            app.SbEditFieldLabel = uilabel(app.PUBasePanel);
            app.SbEditFieldLabel.HorizontalAlignment = 'right';
            app.SbEditFieldLabel.FontName = 'Consolas';
            app.SbEditFieldLabel.Position = [24 101 25 15];
            app.SbEditFieldLabel.Text = 'Sb';
```

```matlab
% Create SbEditField
app.SbEditField = uieditfield(app.PUBasePanel, 'numeric');
app.SbEditField.Editable = 'off';
app.SbEditField.HorizontalAlignment = 'center';
app.SbEditField.FontName = 'Consolas';
app.SbEditField.Position = [64 97 173 22];
% Create Vb1EditFieldLabel
app.Vb1EditFieldLabel = uilabel(app.PUBasePanel);
app.Vb1EditFieldLabel.HorizontalAlignment = 'right';
app.Vb1EditFieldLabel.FontName = 'Consolas';
app.Vb1EditFieldLabel.Position = [24 80 25 15];
app.Vb1EditFieldLabel.Text = 'Vb1';
% Create Vb1EditField
app.Vb1EditField = uieditfield(app.PUBasePanel, 'numeric');
app.Vb1EditField.Editable = 'off';
app.Vb1EditField.HorizontalAlignment = 'center';
app.Vb1EditField.FontName = 'Consolas';
app.Vb1EditField.Position = [64 76 173 22];
% Create Vb2EditFieldLabel
app.Vb2EditFieldLabel = uilabel(app.PUBasePanel);
app.Vb2EditFieldLabel.HorizontalAlignment = 'right';
app.Vb2EditFieldLabel.FontName = 'Consolas';
app.Vb2EditFieldLabel.Position = [24 59 25 15];
app.Vb2EditFieldLabel.Text = 'Vb2';
% Create Vb2EditField
app.Vb2EditField = uieditfield(app.PUBasePanel, 'numeric');
app.Vb2EditField.Editable = 'off';
app.Vb2EditField.HorizontalAlignment = 'center';
app.Vb2EditField.FontName = 'Consolas';
app.Vb2EditField.Position = [64 55 173 22];
% Create Ib1EditFieldLabel
app.Ib1EditFieldLabel = uilabel(app.PUBasePanel);
app.Ib1EditFieldLabel.HorizontalAlignment = 'right';
app.Ib1EditFieldLabel.FontName = 'Consolas';
app.Ib1EditFieldLabel.Position = [24 38 25 15];
app.Ib1EditFieldLabel.Text = 'Ib1';
% Create Ib1EditField
app.Ib1EditField = uieditfield(app.PUBasePanel, 'numeric');
app.Ib1EditField.Editable = 'off';
app.Ib1EditField.HorizontalAlignment = 'center';
app.Ib1EditField.FontName = 'Consolas';
app.Ib1EditField.Position = [64 34 173 22];
% Create Ib2EditFieldLabel
app.Ib2EditFieldLabel = uilabel(app.PUBasePanel);
app.Ib2EditFieldLabel.HorizontalAlignment = 'right';
app.Ib2EditFieldLabel.FontName = 'Consolas';
app.Ib2EditFieldLabel.Position = [24 17 25 15];
app.Ib2EditFieldLabel.Text = 'Ib2';
% Create Ib2EditField
app.Ib2EditField = uieditfield(app.PUBasePanel, 'numeric');
app.Ib2EditField.Editable = 'off';
app.Ib2EditField.HorizontalAlignment = 'center';
app.Ib2EditField.FontName = 'Consolas';
app.Ib2EditField.Position = [64 13 173 22];
% Create KVALabel_3
app.KVALabel_3 = uilabel(app.PUBasePanel);
app.KVALabel_3.HorizontalAlignment = 'center';
app.KVALabel_3.FontName = 'Consolas';
app.KVALabel_3.FontWeight = 'bold';
app.KVALabel_3.Position = [236 98 25 15];
app.KVALabel_3.Text = 'KVA';
% Create ALabel_8
app.ALabel_8 = uilabel(app.PUBasePanel);
app.ALabel_8.HorizontalAlignment = 'center';
app.ALabel_8.FontName = 'Consolas';
app.ALabel_8.FontWeight = 'bold';
app.ALabel_8.Position = [236 38 25 15];
app.ALabel_8.Text = 'A';
% Create VLabel_13
app.VLabel_13 = uilabel(app.PUBasePanel);
app.VLabel_13.HorizontalAlignment = 'center';
app.VLabel_13.FontName = 'Consolas';
```

```matlab
            app.VLabel_13.FontWeight = 'bold';
            app.VLabel_13.Position = [236 59 25 15];
            app.VLabel_13.Text = 'V';
            % Create VLabel_12
            app.VLabel_12 = uilabel(app.PUBasePanel);
            app.VLabel_12.HorizontalAlignment = 'center';
            app.VLabel_12.FontName = 'Consolas';
            app.VLabel_12.FontWeight = 'bold';
            app.VLabel_12.Position = [236 79 25 15];
            app.VLabel_12.Text = 'V';
            % Create ALabel_9
            app.ALabel_9 = uilabel(app.PUBasePanel);
            app.ALabel_9.HorizontalAlignment = 'center';
            app.ALabel_9.FontName = 'Consolas';
            app.ALabel_9.FontWeight = 'bold';
            app.ALabel_9.Position = [236 17 25 15];
            app.ALabel_9.Text = 'A';
            % Create DATOSDEPLACAPanel
            app.DATOSDEPLACAPanel =
uipanel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.DATOSDEPLACAPanel.ForegroundColor = [0.6392 0.0784 0.1804];
            app.DATOSDEPLACAPanel.TitlePosition = 'centertop';
            app.DATOSDEPLACAPanel.Title = 'DATOS DE PLACA';
            app.DATOSDEPLACAPanel.FontWeight = 'bold';
            app.DATOSDEPLACAPanel.Position = [10 435 260 156];
            % Create RelacindetransformacinLabel
            app.RelacindetransformacinLabel = uilabel(app.DATOSDEPLACAPanel);
            app.RelacindetransformacinLabel.HorizontalAlignment = 'center';
            app.RelacindetransformacinLabel.FontName = 'Consolas';
            app.RelacindetransformacinLabel.FontWeight = 'bold';
            app.RelacindetransformacinLabel.Position = [42 77 184 15];
            app.RelacindetransformacinLabel.Text = 'Relación de transformación:';
            % Create EditFieldLabel
            app.EditFieldLabel = uilabel(app.DATOSDEPLACAPanel);
            app.EditFieldLabel.HorizontalAlignment = 'right';
            app.EditFieldLabel.FontName = 'Consolas';
            app.EditFieldLabel.FontWeight = 'bold';
            app.EditFieldLabel.Position = [104 52 25 15];
            app.EditFieldLabel.Text = '/';
            % Create LadoDeBajaEditField
            app.LadoDeBajaEditField = uieditfield(app.DATOSDEPLACAPanel, 'numeric');
            app.LadoDeBajaEditField.ValueChangedFcn = createCallbackFcn(app,
@LadoDeBajaEditFieldValueChanged, true);
            app.LadoDeBajaEditField.HorizontalAlignment = 'center';
            app.LadoDeBajaEditField.FontName = 'Consolas';
            app.LadoDeBajaEditField.FontWeight = 'bold';
            app.LadoDeBajaEditField.Position = [144 48 83 22];
            % Create PotenciaaparenteEditField_2Label
            app.PotenciaaparenteEditField_2Label = uilabel(app.DATOSDEPLACAPanel);
            app.PotenciaaparenteEditField_2Label.HorizontalAlignment = 'right';
            app.PotenciaaparenteEditField_2Label.FontName = 'Consolas';
            app.PotenciaaparenteEditField_2Label.FontWeight = 'bold';
            app.PotenciaaparenteEditField_2Label.Position = [8 110 118 15];
            app.PotenciaaparenteEditField_2Label.Text = 'Potencia aparente';
            % Create PotenciaAparenteEditField
            app.PotenciaAparenteEditField = uieditfield(app.DATOSDEPLACAPanel, 'numeric');
            app.PotenciaAparenteEditField.ValueChangedFcn = createCallbackFcn(app,
@PotenciaAparenteEditFieldValueChanged, true);
            app.PotenciaAparenteEditField.HorizontalAlignment = 'center';
            app.PotenciaAparenteEditField.FontName = 'Consolas';
            app.PotenciaAparenteEditField.FontWeight = 'bold';
            app.PotenciaAparenteEditField.Position = [141 106 84 22];
            % Create EditField_3Label
            app.EditField_3Label = uilabel(app.DATOSDEPLACAPanel);
            app.EditField_3Label.HorizontalAlignment = 'right';
            app.EditField_3Label.FontName = 'Consolas';
            app.EditField_3Label.FontWeight = 'bold';
            app.EditField_3Label.Position = [6 59 25 15];
            app.EditField_3Label.Text = '';
            % Create LadoDeAltaEditField
            app.LadoDeAltaEditField = uieditfield(app.DATOSDEPLACAPanel, 'numeric');
```

```matlab
            app.LadoDeAltaEditField.ValueChangedFcn = createCallbackFcn(app,
@LadoDeAltaEditFieldValueChanged, true);
            app.LadoDeAltaEditField.HorizontalAlignment = 'center';
            app.LadoDeAltaEditField.FontName = 'Consolas';
            app.LadoDeAltaEditField.FontWeight = 'bold';
            app.LadoDeAltaEditField.Position = [30 48 83 22];
            % Create FrecuenciaEditFieldLabel
            app.FrecuenciaEditFieldLabel = uilabel(app.DATOSDEPLACAPanel);
            app.FrecuenciaEditFieldLabel.HorizontalAlignment = 'right';
            app.FrecuenciaEditFieldLabel.FontName = 'Consolas';
            app.FrecuenciaEditFieldLabel.FontWeight = 'bold';
            app.FrecuenciaEditFieldLabel.Position = [4 15 71 15];
            app.FrecuenciaEditFieldLabel.Text = 'Frecuencia';
            % Create FrecuenciaEditField
            app.FrecuenciaEditField = uieditfield(app.DATOSDEPLACAPanel, 'numeric');
            app.FrecuenciaEditField.Editable = 'off';
            app.FrecuenciaEditField.HorizontalAlignment = 'center';
            app.FrecuenciaEditField.FontName = 'Consolas';
            app.FrecuenciaEditField.FontWeight = 'bold';
            app.FrecuenciaEditField.Position = [90 11 147 22];
            app.FrecuenciaEditField.Value = 60;
            % Create KVALabel
            app.KVALabel = uilabel(app.DATOSDEPLACAPanel);
            app.KVALabel.HorizontalAlignment = 'right';
            app.KVALabel.FontWeight = 'bold';
            app.KVALabel.Position = [224 110 31 15];
            app.KVALabel.Text = 'KVA';
            % Create HzLabel
            app.HzLabel = uilabel(app.DATOSDEPLACAPanel);
            app.HzLabel.HorizontalAlignment = 'right';
            app.HzLabel.FontWeight = 'bold';
            app.HzLabel.Position = [230 15 25 15];
            app.HzLabel.Text = 'Hz';
            % Create VLabel_14
            app.VLabel_14 = uilabel(app.DATOSDEPLACAPanel);
            app.VLabel_14.HorizontalAlignment = 'center';
            app.VLabel_14.FontWeight = 'bold';
            app.VLabel_14.Position = [225 52 25 15];
            app.VLabel_14.Text = 'V';
            % Create DATOSDEPRUEBASPanel
            app.DATOSDEPRUEBASPanel =
uipanel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.DATOSDEPRUEBASPanel.ForegroundColor = [0.6392 0.0784 0.1804];
            app.DATOSDEPRUEBASPanel.TitlePosition = 'centertop';
            app.DATOSDEPRUEBASPanel.Title = 'DATOS DE PRUEBAS';
            app.DATOSDEPRUEBASPanel.FontWeight = 'bold';
            app.DATOSDEPRUEBASPanel.Position = [10 195 260 235];
            % Create LadodebajaCALabel
            app.LadodebajaCALabel = uilabel(app.DATOSDEPRUEBASPanel);
            app.LadodebajaCALabel.FontWeight = 'bold';
            app.LadodebajaCALabel.Position = [17 197 110 15];
            app.LadodebajaCALabel.Text = 'Lado de baja (CA):';
            % Create LadodealtaCSLabel
            app.LadodealtaCSLabel = uilabel(app.DATOSDEPRUEBASPanel);
            app.LadodealtaCSLabel.FontWeight = 'bold';
            app.LadodealtaCSLabel.Position = [17 86 106 15];
            app.LadodealtaCSLabel.Text = 'Lado de alta (CS):';
            % Create VoltajeEditFieldLabel
            app.VoltajeEditFieldLabel = uilabel(app.DATOSDEPRUEBASPanel);
            app.VoltajeEditFieldLabel.HorizontalAlignment = 'right';
            app.VoltajeEditFieldLabel.FontName = 'Consolas';
            app.VoltajeEditFieldLabel.Position = [21 168 52 15];
            app.VoltajeEditFieldLabel.Text = 'Voltaje';
            % Create VoltajeEditField
            app.VoltajeEditField = uieditfield(app.DATOSDEPRUEBASPanel, 'numeric');
            app.VoltajeEditField.HorizontalAlignment = 'center';
            app.VoltajeEditField.FontName = 'Consolas';
            app.VoltajeEditField.Position = [88 164 149 22];
            % Create CorrienteEditFieldLabel
            app.CorrienteEditFieldLabel = uilabel(app.DATOSDEPRUEBASPanel);
            app.CorrienteEditFieldLabel.HorizontalAlignment = 'right';
            app.CorrienteEditFieldLabel.FontName = 'Consolas';
```

```matlab
app.CorrienteEditFieldLabel.Position = [8 142 65 15];
app.CorrienteEditFieldLabel.Text = 'Corriente';
% Create CorrienteEditField
app.CorrienteEditField = uieditfield(app.DATOSDEPRUEBASPanel, 'numeric');
app.CorrienteEditField.HorizontalAlignment = 'center';
app.CorrienteEditField.FontName = 'Consolas';
app.CorrienteEditField.Position = [88 138 149 22];
% Create PotenciaEditFieldLabel
app.PotenciaEditFieldLabel = uilabel(app.DATOSDEPRUEBASPanel);
app.PotenciaEditFieldLabel.HorizontalAlignment = 'right';
app.PotenciaEditFieldLabel.FontName = 'Consolas';
app.PotenciaEditFieldLabel.Position = [15 117 58 15];
app.PotenciaEditFieldLabel.Text = 'Potencia';
% Create PotenciaEditField
app.PotenciaEditField = uieditfield(app.DATOSDEPRUEBASPanel, 'numeric');
app.PotenciaEditField.HorizontalAlignment = 'center';
app.PotenciaEditField.FontName = 'Consolas';
app.PotenciaEditField.Position = [88 113 149 22];
% Create CorrienteEditField_2Label
app.CorrienteEditField_2Label = uilabel(app.DATOSDEPRUEBASPanel);
app.CorrienteEditField_2Label.HorizontalAlignment = 'right';
app.CorrienteEditField_2Label.FontName = 'Consolas';
app.CorrienteEditField_2Label.Position = [8 40 65 15];
app.CorrienteEditField_2Label.Text = 'Corriente';
% Create CorrienteEditField_2
app.CorrienteEditField_2 = uieditfield(app.DATOSDEPRUEBASPanel, 'numeric');
app.CorrienteEditField_2.HorizontalAlignment = 'center';
app.CorrienteEditField_2.FontName = 'Consolas';
app.CorrienteEditField_2.Position = [88 36 149 22];
% Create VoltajeEditField_2Label
app.VoltajeEditField_2Label = uilabel(app.DATOSDEPRUEBASPanel);
app.VoltajeEditField_2Label.HorizontalAlignment = 'right';
app.VoltajeEditField_2Label.FontName = 'Consolas';
app.VoltajeEditField_2Label.Position = [21 66 52 15];
app.VoltajeEditField_2Label.Text = 'Voltaje';
% Create VoltajeEditField_2
app.VoltajeEditField_2 = uieditfield(app.DATOSDEPRUEBASPanel, 'numeric');
app.VoltajeEditField_2.HorizontalAlignment = 'center';
app.VoltajeEditField_2.FontName = 'Consolas';
app.VoltajeEditField_2.Position = [88 62 149 22];
% Create PotenciaEditField_2Label
app.PotenciaEditField_2Label = uilabel(app.DATOSDEPRUEBASPanel);
app.PotenciaEditField_2Label.HorizontalAlignment = 'right';
app.PotenciaEditField_2Label.FontName = 'Consolas';
app.PotenciaEditField_2Label.Position = [15 15 58 15];
app.PotenciaEditField_2Label.Text = 'Potencia';
% Create PotenciaEditField_2
app.PotenciaEditField_2 = uieditfield(app.DATOSDEPRUEBASPanel, 'numeric');
app.PotenciaEditField_2.HorizontalAlignment = 'center';
app.PotenciaEditField_2.FontName = 'Consolas';
app.PotenciaEditField_2.Position = [88 11 149 22];
% Create VLabel_5
app.VLabel_5 = uilabel(app.DATOSDEPRUEBASPanel);
app.VLabel_5.HorizontalAlignment = 'center';
app.VLabel_5.FontWeight = 'bold';
app.VLabel_5.Position = [230 168 25 15];
app.VLabel_5.Text = 'V';
% Create ALabel_5
app.ALabel_5 = uilabel(app.DATOSDEPRUEBASPanel);
app.ALabel_5.HorizontalAlignment = 'center';
app.ALabel_5.FontWeight = 'bold';
app.ALabel_5.Position = [230 142 25 15];
app.ALabel_5.Text = 'A';
% Create WLabel_5
app.WLabel_5 = uilabel(app.DATOSDEPRUEBASPanel);
app.WLabel_5.HorizontalAlignment = 'center';
app.WLabel_5.FontWeight = 'bold';
app.WLabel_5.Position = [230 117 25 15];
app.WLabel_5.Text = 'W';
% Create VLabel_6
app.VLabel_6 = uilabel(app.DATOSDEPRUEBASPanel);
app.VLabel_6.HorizontalAlignment = 'center';
```

```matlab
            app.VLabel_6.FontWeight = 'bold';
            app.VLabel_6.Position = [230 67 25 15];
            app.VLabel_6.Text = 'V';

            % Create ALabel_6
            app.ALabel_6 = uilabel(app.DATOSDEPRUEBASPanel);
            app.ALabel_6.HorizontalAlignment = 'center';
            app.ALabel_6.FontWeight = 'bold';
            app.ALabel_6.Position = [230 41 25 15];
            app.ALabel_6.Text = 'A';

            % Create WLabel_6
            app.WLabel_6 = uilabel(app.DATOSDEPRUEBASPanel);
            app.WLabel_6.HorizontalAlignment = 'center';
            app.WLabel_6.FontWeight = 'bold';
            app.WLabel_6.Position = [230 16 25 15];
            app.WLabel_6.Text = 'W';

            % Create CALCULOSPanel
            app.CALCULOSPanel = uipanel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.CALCULOSPanel.ForegroundColor = [0.6392 0.0784 0.1804];
            app.CALCULOSPanel.TitlePosition = 'centertop';
            app.CALCULOSPanel.Title = 'CÁLCULOS';
            app.CALCULOSPanel.BackgroundColor = [0.9412 0.9412 0.9412];
            app.CALCULOSPanel.FontWeight = 'bold';
            app.CALCULOSPanel.Position = [766 224 304 367];

            % Create TabGroup
            app.TabGroup = uitabgroup(app.CALCULOSPanel);
            app.TabGroup.TabLocation = 'left';
            app.TabGroup.Position = [14 14 276 322];

            % Create VocTab
            app.VocTab = uitab(app.TabGroup);
            app.VocTab.Title = 'Voc';
            app.VocTab.ForegroundColor = [0.6392 0.0784 0.1804];

            % Create VocLabel
            app.VocLabel = uilabel(app.VocTab);
            app.VocLabel.FontName = 'Consolas';
            app.VocLabel.FontSize = 14;
            app.VocLabel.FontWeight = 'bold';
            app.VocLabel.Position = [61 269 52 18];
            app.VocLabel.Text = 'Voc = ';

            % Create Vb2Label
            app.Vb2Label = uilabel(app.VocTab);
            app.Vb2Label.HorizontalAlignment = 'center';
            app.Vb2Label.FontName = 'Consolas';
            app.Vb2Label.FontSize = 14;
            app.Vb2Label.FontWeight = 'bold';
            app.Vb2Label.Position = [112 260 29 18];
            app.Vb2Label.Text = 'Vb2';

            % Create VcaLabel_2
            app.VcaLabel_2 = uilabel(app.VocTab);
            app.VcaLabel_2.HorizontalAlignment = 'center';
            app.VcaLabel_2.VerticalAlignment = 'center';
            app.VcaLabel_2.FontName = 'Consolas';
            app.VcaLabel_2.FontSize = 14;
            app.VcaLabel_2.FontWeight = 'bold';
            app.VcaLabel_2.Position = [112 278 29 18];
            app.VcaLabel_2.Text = 'Vca';

            % Create Label
            app.Label = uilabel(app.VocTab);
            app.Label.HorizontalAlignment = 'center';
            app.Label.VerticalAlignment = 'center';
            app.Label.FontName = 'Consolas';
            app.Label.FontSize = 14;
            app.Label.FontWeight = 'bold';
            app.Label.Position = [105 270 44 18];
            app.Label.Text = '-----';

            % Create VLabel_2
            app.VLabel_2 = uilabel(app.VocTab);
            app.VLabel_2.HorizontalAlignment = 'center';
            app.VLabel_2.VerticalAlignment = 'center';
            app.VLabel_2.FontName = 'Consolas';
            app.VLabel_2.FontSize = 14;
            app.VLabel_2.FontWeight = 'bold';
            app.VLabel_2.Position = [188 196 25 18];
```

```matlab
app.VLabel_2.Text = 'V';
% Create VLabel
app.VLabel = uilabel(app.VocTab);
app.VLabel.HorizontalAlignment = 'center';
app.VLabel.FontName = 'Consolas';
app.VLabel.FontSize = 14;
app.VLabel.FontWeight = 'bold';
app.VLabel.Position = [188 164 25 18];
app.VLabel.Text = 'V';
% Create Label_4
app.Label_4 = uilabel(app.VocTab);
app.Label_4.HorizontalAlignment = 'center';
app.Label_4.VerticalAlignment = 'center';
app.Label_4.FontName = 'Consolas';
app.Label_4.FontSize = 14;
app.Label_4.FontWeight = 'bold';
app.Label_4.Position = [4 182 207 18];
app.Label_4.Text = '= -----------------------';
% Create EditField_Vca
app.EditField_Vca = uieditfield(app.VocTab, 'numeric');
app.EditField_Vca.Editable = 'off';
app.EditField_Vca.HorizontalAlignment = 'center';
app.EditField_Vca.FontName = 'Consolas';
app.EditField_Vca.FontSize = 14;
app.EditField_Vca.Position = [19 195 170 22];
% Create EditField_5
app.EditField_5 = uieditfield(app.VocTab, 'numeric');
app.EditField_5.Editable = 'off';
app.EditField_5.HorizontalAlignment = 'center';
app.EditField_5.FontName = 'Consolas';
app.EditField_5.FontSize = 14;
app.EditField_5.Position = [19 163 170 22];
% Create VocLabel_3
app.VocLabel_3 = uilabel(app.VocTab);
app.VocLabel_3.FontName = 'Consolas';
app.VocLabel_3.FontSize = 14;
app.VocLabel_3.FontWeight = 'bold';
app.VocLabel_3.Position = [17 85 52 18];
app.VocLabel_3.Text = 'Voc = ';
% Create EditField_6
app.EditField_6 = uieditfield(app.VocTab, 'numeric');
app.EditField_6.Editable = 'off';
app.EditField_6.HorizontalAlignment = 'center';
app.EditField_6.FontName = 'Consolas';
app.EditField_6.FontSize = 14;
app.EditField_6.Position = [61 83 102 22];
% Create puLabel
app.puLabel = uilabel(app.VocTab);
app.puLabel.HorizontalAlignment = 'center';
app.puLabel.FontName = 'Consolas';
app.puLabel.FontSize = 14;
app.puLabel.FontWeight = 'bold';
app.puLabel.Position = [168 85 25 18];
app.puLabel.Text = 'pu';
% Create IocTab
app.IocTab = uitab(app.TabGroup);
app.IocTab.Title = 'Ioc';
app.IocTab.ForegroundColor = [0.6392 0.0784 0.1804];
% Create IocLabel
app.IocLabel = uilabel(app.IocTab);
app.IocLabel.FontName = 'Consolas';
app.IocLabel.FontSize = 14;
app.IocLabel.FontWeight = 'bold';
app.IocLabel.Position = [61 269 52 18];
app.IocLabel.Text = 'Ioc = ';
% Create Ib2Label
app.Ib2Label = uilabel(app.IocTab);
app.Ib2Label.HorizontalAlignment = 'center';
app.Ib2Label.FontName = 'Consolas';
app.Ib2Label.FontSize = 14;
app.Ib2Label.FontWeight = 'bold';
app.Ib2Label.Position = [112 260 29 18];
```

```matlab
app.Ib2Label.Text = 'Ib2';
% Create IcaLabel
app.IcaLabel = uilabel(app.IocTab);
app.IcaLabel.HorizontalAlignment = 'center';
app.IcaLabel.VerticalAlignment = 'center';
app.IcaLabel.FontName = 'Consolas';
app.IcaLabel.FontSize = 14;
app.IcaLabel.FontWeight = 'bold';
app.IcaLabel.Position = [112 278 29 18];
app.IcaLabel.Text = 'Ica';
% Create Label_6
app.Label_6 = uilabel(app.IocTab);
app.Label_6.HorizontalAlignment = 'center';
app.Label_6.VerticalAlignment = 'center';
app.Label_6.FontName = 'Consolas';
app.Label_6.FontSize = 14;
app.Label_6.FontWeight = 'bold';
app.Label_6.Position = [105 270 44 18];
app.Label_6.Text = '-----';
% Create ALabel
app.ALabel = uilabel(app.IocTab);
app.ALabel.HorizontalAlignment = 'center';
app.ALabel.VerticalAlignment = 'center';
app.ALabel.FontName = 'Consolas';
app.ALabel.FontSize = 14;
app.ALabel.FontWeight = 'bold';
app.ALabel.Position = [188 196 25 18];
app.ALabel.Text = 'A';
% Create ALabel_2
app.ALabel_2 = uilabel(app.IocTab);
app.ALabel_2.HorizontalAlignment = 'center';
app.ALabel_2.FontName = 'Consolas';
app.ALabel_2.FontSize = 14;
app.ALabel_2.FontWeight = 'bold';
app.ALabel_2.Position = [188 164 25 18];
app.ALabel_2.Text = 'A';
% Create Label_7
app.Label_7 = uilabel(app.IocTab);
app.Label_7.HorizontalAlignment = 'center';
app.Label_7.VerticalAlignment = 'center';
app.Label_7.FontName = 'Consolas';
app.Label_7.FontSize = 14;
app.Label_7.FontWeight = 'bold';
app.Label_7.Position = [4 182 207 18];
app.Label_7.Text = '= ----------------------';
% Create EditField_7
app.EditField_7 = uieditfield(app.IocTab, 'numeric');
app.EditField_7.Editable = 'off';
app.EditField_7.HorizontalAlignment = 'center';
app.EditField_7.FontName = 'Consolas';
app.EditField_7.FontSize = 14;
app.EditField_7.Position = [19 195 170 22];
% Create EditField_8
app.EditField_8 = uieditfield(app.IocTab, 'numeric');
app.EditField_8.Editable = 'off';
app.EditField_8.HorizontalAlignment = 'center';
app.EditField_8.FontName = 'Consolas';
app.EditField_8.FontSize = 14;
app.EditField_8.Position = [19 163 170 22];
% Create IocLabel_3
app.IocLabel_3 = uilabel(app.IocTab);
app.IocLabel_3.FontName = 'Consolas';
app.IocLabel_3.FontSize = 14;
app.IocLabel_3.FontWeight = 'bold';
app.IocLabel_3.Position = [17 85 52 18];
app.IocLabel_3.Text = 'Ioc = ';
% Create EditField_9
app.EditField_9 = uieditfield(app.IocTab, 'numeric');
app.EditField_9.Editable = 'off';
app.EditField_9.HorizontalAlignment = 'center';
app.EditField_9.FontName = 'Consolas';
app.EditField_9.FontSize = 14;
```

```matlab
app.EditField_9.Position = [61 83 102 22];
% Create puLabel_2
app.puLabel_2 = uilabel(app.IocTab);
app.puLabel_2.HorizontalAlignment = 'center';
app.puLabel_2.FontName = 'Consolas';
app.puLabel_2.FontSize = 14;
app.puLabel_2.FontWeight = 'bold';
app.puLabel_2.Position = [168 85 25 18];
app.puLabel_2.Text = 'pu';
% Create PocTab
app.PocTab = uitab(app.TabGroup);
app.PocTab.Title = 'Poc';
app.PocTab.ForegroundColor = [0.6392 0.0784 0.1804];
% Create PocLabel
app.PocLabel = uilabel(app.PocTab);
app.PocLabel.FontName = 'Consolas';
app.PocLabel.FontSize = 14;
app.PocLabel.FontWeight = 'bold';
app.PocLabel.Position = [64 256 52 18];
app.PocLabel.Text = 'Poc = ';
% Create SbLabel
app.SbLabel = uilabel(app.PocTab);
app.SbLabel.HorizontalAlignment = 'center';
app.SbLabel.FontName = 'Consolas';
app.SbLabel.FontSize = 14;
app.SbLabel.FontWeight = 'bold';
app.SbLabel.Position = [117 247 25 18];
app.SbLabel.Text = 'Sb';
% Create PcaLabel
app.PcaLabel = uilabel(app.PocTab);
app.PcaLabel.HorizontalAlignment = 'center';
app.PcaLabel.VerticalAlignment = 'center';
app.PcaLabel.FontName = 'Consolas';
app.PcaLabel.FontSize = 14;
app.PcaLabel.FontWeight = 'bold';
app.PcaLabel.Position = [115 265 29 18];
app.PcaLabel.Text = 'Pca';
% Create Label_9
app.Label_9 = uilabel(app.PocTab);
app.Label_9.HorizontalAlignment = 'center';
app.Label_9.VerticalAlignment = 'center';
app.Label_9.FontName = 'Consolas';
app.Label_9.FontSize = 14;
app.Label_9.FontWeight = 'bold';
app.Label_9.Position = [108 257 44 18];
app.Label_9.Text = '-----';
% Create WLabel
app.WLabel = uilabel(app.PocTab);
app.WLabel.HorizontalAlignment = 'center';
app.WLabel.VerticalAlignment = 'center';
app.WLabel.FontName = 'Consolas';
app.WLabel.FontSize = 14;
app.WLabel.FontWeight = 'bold';
app.WLabel.Position = [192 211 25 18];
app.WLabel.Text = 'W';
% Create WLabel_2
app.WLabel_2 = uilabel(app.PocTab);
app.WLabel_2.HorizontalAlignment = 'center';
app.WLabel_2.FontName = 'Consolas';
app.WLabel_2.FontSize = 14;
app.WLabel_2.FontWeight = 'bold';
app.WLabel_2.Position = [192 179 25 18];
app.WLabel_2.Text = 'W';
% Create Label_10
app.Label_10 = uilabel(app.PocTab);
app.Label_10.HorizontalAlignment = 'center';
app.Label_10.VerticalAlignment = 'center';
app.Label_10.FontName = 'Consolas';
app.Label_10.FontSize = 14;
app.Label_10.FontWeight = 'bold';
app.Label_10.Position = [8 197 207 18];
app.Label_10.Text = '= ----------------------';
```

```matlab
% Create EditField_10
app.EditField_10 = uieditfield(app.PocTab, 'numeric');
app.EditField_10.Editable = 'off';
app.EditField_10.HorizontalAlignment = 'center';
app.EditField_10.FontName = 'Consolas';
app.EditField_10.FontSize = 14;
app.EditField_10.Position = [23 210 170 22];
% Create EditField_11
app.EditField_11 = uieditfield(app.PocTab, 'numeric');
app.EditField_11.Editable = 'off';
app.EditField_11.HorizontalAlignment = 'center';
app.EditField_11.FontName = 'Consolas';
app.EditField_11.FontSize = 14;
app.EditField_11.Position = [23 178 170 22];
% Create PocLabel_3
app.PocLabel_3 = uilabel(app.PocTab);
app.PocLabel_3.FontName = 'Consolas';
app.PocLabel_3.FontSize = 14;
app.PocLabel_3.FontWeight = 'bold';
app.PocLabel_3.Position = [20 132 52 18];
app.PocLabel_3.Text = 'Poc = ';
% Create EditField_12
app.EditField_12 = uieditfield(app.PocTab, 'numeric');
app.EditField_12.Editable = 'off';
app.EditField_12.HorizontalAlignment = 'center';
app.EditField_12.FontName = 'Consolas';
app.EditField_12.FontSize = 14;
app.EditField_12.Position = [64 130 102 22];
% Create puLabel_3
app.puLabel_3 = uilabel(app.PocTab);
app.puLabel_3.HorizontalAlignment = 'center';
app.puLabel_3.FontName = 'Consolas';
app.puLabel_3.FontSize = 14;
app.puLabel_3.FontWeight = 'bold';
app.puLabel_3.Position = [171 132 25 18];
app.puLabel_3.Text = 'pu';
% Create PerdidasenelncleoLabel
app.PerdidasenelncleoLabel = uilabel(app.PocTab);
app.PerdidasenelncleoLabel.BackgroundColor = [1 1 0.502];
app.PerdidasenelncleoLabel.HorizontalAlignment = 'center';
app.PerdidasenelncleoLabel.VerticalAlignment = 'center';
app.PerdidasenelncleoLabel.FontName = 'Consolas';
app.PerdidasenelncleoLabel.FontAngle = 'italic';
app.PerdidasenelncleoLabel.FontColor = [0.149 0.149 0.149];
app.PerdidasenelncleoLabel.Position = [36 87 144 15];
app.PerdidasenelncleoLabel.Text = 'Perdidas en el núcleo';
% Create VscTab
app.VscTab = uitab(app.TabGroup);
app.VscTab.Title = 'Vsc';
app.VscTab.ForegroundColor = [0.6392 0.0784 0.1804];
% Create VscLabel
app.VscLabel = uilabel(app.VscTab);
app.VscLabel.FontName = 'Consolas';
app.VscLabel.FontSize = 14;
app.VscLabel.FontWeight = 'bold';
app.VscLabel.Position = [61 269 52 18];
app.VscLabel.Text = 'Vsc = ';
% Create Vb1Label
app.Vb1Label = uilabel(app.VscTab);
app.Vb1Label.HorizontalAlignment = 'center';
app.Vb1Label.FontName = 'Consolas';
app.Vb1Label.FontSize = 14;
app.Vb1Label.FontWeight = 'bold';
app.Vb1Label.Position = [112 260 29 18];
app.Vb1Label.Text = 'Vb1';
% Create VcsLabel
app.VcsLabel = uilabel(app.VscTab);
app.VcsLabel.HorizontalAlignment = 'center';
app.VcsLabel.VerticalAlignment = 'center';
app.VcsLabel.FontName = 'Consolas';
app.VcsLabel.FontSize = 14;
app.VcsLabel.FontWeight = 'bold';
```

```matlab
app.VcsLabel.Position = [112 278 29 18];
app.VcsLabel.Text = 'Vcs';
% Create Label_12
app.Label_12 = uilabel(app.VscTab);
app.Label_12.HorizontalAlignment = 'center';
app.Label_12.VerticalAlignment = 'center';
app.Label_12.FontName = 'Consolas';
app.Label_12.FontSize = 14;
app.Label_12.FontWeight = 'bold';
app.Label_12.Position = [105 270 44 18];
app.Label_12.Text = '-----';
% Create VLabel_3
app.VLabel_3 = uilabel(app.VscTab);
app.VLabel_3.HorizontalAlignment = 'center';
app.VLabel_3.VerticalAlignment = 'center';
app.VLabel_3.FontName = 'Consolas';
app.VLabel_3.FontSize = 14;
app.VLabel_3.FontWeight = 'bold';
app.VLabel_3.Position = [192 194 25 18];
app.VLabel_3.Text = 'V';
% Create VLabel_4
app.VLabel_4 = uilabel(app.VscTab);
app.VLabel_4.HorizontalAlignment = 'center';
app.VLabel_4.FontName = 'Consolas';
app.VLabel_4.FontSize = 14;
app.VLabel_4.FontWeight = 'bold';
app.VLabel_4.Position = [192 162 25 18];
app.VLabel_4.Text = 'V';
% Create Label_13
app.Label_13 = uilabel(app.VscTab);
app.Label_13.HorizontalAlignment = 'center';
app.Label_13.VerticalAlignment = 'center';
app.Label_13.FontName = 'Consolas';
app.Label_13.FontSize = 14;
app.Label_13.FontWeight = 'bold';
app.Label_13.Position = [8 180 207 18];
app.Label_13.Text = '= ----------------------';
% Create EditField_13
app.EditField_13 = uieditfield(app.VscTab, 'numeric');
app.EditField_13.Editable = 'off';
app.EditField_13.HorizontalAlignment = 'center';
app.EditField_13.FontName = 'Consolas';
app.EditField_13.FontSize = 14;
app.EditField_13.Position = [23 193 170 22];
% Create EditField_14
app.EditField_14 = uieditfield(app.VscTab, 'numeric');
app.EditField_14.Editable = 'off';
app.EditField_14.HorizontalAlignment = 'center';
app.EditField_14.FontName = 'Consolas';
app.EditField_14.FontSize = 14;
app.EditField_14.Position = [23 161 170 22];
% Create VscLabel_3
app.VscLabel_3 = uilabel(app.VscTab);
app.VscLabel_3.FontName = 'Consolas';
app.VscLabel_3.FontSize = 14;
app.VscLabel_3.FontWeight = 'bold';
app.VscLabel_3.Position = [17 85 52 18];
app.VscLabel_3.Text = 'Vsc = ';
% Create EditField_15
app.EditField_15 = uieditfield(app.VscTab, 'numeric');
app.EditField_15.Editable = 'off';
app.EditField_15.HorizontalAlignment = 'center';
app.EditField_15.FontName = 'Consolas';
app.EditField_15.FontSize = 14;
app.EditField_15.Position = [61 83 102 22];
% Create puLabel_4
app.puLabel_4 = uilabel(app.VscTab);
app.puLabel_4.HorizontalAlignment = 'center';
app.puLabel_4.FontName = 'Consolas';
app.puLabel_4.FontSize = 14;
app.puLabel_4.FontWeight = 'bold';
app.puLabel_4.Position = [168 85 25 18];
```

```matlab
app.puLabel_4.Text = 'pu';
% Create IscTab
app.IscTab = uitab(app.TabGroup);
app.IscTab.Title = 'Isc';
app.IscTab.ForegroundColor = [0.6392 0.0784 0.1804];
% Create IscLabel
app.IscLabel = uilabel(app.IscTab);
app.IscLabel.FontName = 'Consolas';
app.IscLabel.FontSize = 14;
app.IscLabel.FontWeight = 'bold';
app.IscLabel.Position = [61 269 52 18];
app.IscLabel.Text = 'Isc = ';
% Create Ib1Label
app.Ib1Label = uilabel(app.IscTab);
app.Ib1Label.HorizontalAlignment = 'center';
app.Ib1Label.FontName = 'Consolas';
app.Ib1Label.FontSize = 14;
app.Ib1Label.FontWeight = 'bold';
app.Ib1Label.Position = [112 260 29 18];
app.Ib1Label.Text = 'Ib1';
% Create IcsLabel
app.IcsLabel = uilabel(app.IscTab);
app.IcsLabel.HorizontalAlignment = 'center';
app.IcsLabel.VerticalAlignment = 'center';
app.IcsLabel.FontName = 'Consolas';
app.IcsLabel.FontSize = 14;
app.IcsLabel.FontWeight = 'bold';
app.IcsLabel.Position = [112 278 29 18];
app.IcsLabel.Text = 'Ics';
% Create Label_15
app.Label_15 = uilabel(app.IscTab);
app.Label_15.HorizontalAlignment = 'center';
app.Label_15.VerticalAlignment = 'center';
app.Label_15.FontName = 'Consolas';
app.Label_15.FontSize = 14;
app.Label_15.FontWeight = 'bold';
app.Label_15.Position = [105 270 44 18];
app.Label_15.Text = '-----';
% Create ALabel_3
app.ALabel_3 = uilabel(app.IscTab);
app.ALabel_3.HorizontalAlignment = 'center';
app.ALabel_3.VerticalAlignment = 'center';
app.ALabel_3.FontName = 'Consolas';
app.ALabel_3.FontSize = 14;
app.ALabel_3.FontWeight = 'bold';
app.ALabel_3.Position = [192 200 25 18];
app.ALabel_3.Text = 'A';
% Create ALabel_4
app.ALabel_4 = uilabel(app.IscTab);
app.ALabel_4.HorizontalAlignment = 'center';
app.ALabel_4.FontName = 'Consolas';
app.ALabel_4.FontSize = 14;
app.ALabel_4.FontWeight = 'bold';
app.ALabel_4.Position = [192 168 25 18];
app.ALabel_4.Text = 'A';
% Create Label_16
app.Label_16 = uilabel(app.IscTab);
app.Label_16.HorizontalAlignment = 'center';
app.Label_16.VerticalAlignment = 'center';
app.Label_16.FontName = 'Consolas';
app.Label_16.FontSize = 14;
app.Label_16.FontWeight = 'bold';
app.Label_16.Position = [8 186 207 18];
app.Label_16.Text = '= ----------------------';
% Create EditField_16
app.EditField_16 = uieditfield(app.IscTab, 'numeric');
app.EditField_16.Editable = 'off';
app.EditField_16.HorizontalAlignment = 'center';
app.EditField_16.FontName = 'Consolas';
app.EditField_16.FontSize = 14;
app.EditField_16.Position = [23 199 170 22];
% Create EditField_17
```

```matlab
app.EditField_17 = uieditfield(app.IscTab, 'numeric');
app.EditField_17.Editable = 'off';
app.EditField_17.HorizontalAlignment = 'center';
app.EditField_17.FontName = 'Consolas';
app.EditField_17.FontSize = 14;
app.EditField_17.Position = [23 167 170 22];
% Create IscLabel_3
app.IscLabel_3 = uilabel(app.IscTab);
app.IscLabel_3.FontName = 'Consolas';
app.IscLabel_3.FontSize = 14;
app.IscLabel_3.FontWeight = 'bold';
app.IscLabel_3.Position = [14 85 52 18];
app.IscLabel_3.Text = 'Isc = ';
% Create EditField_18
app.EditField_18 = uieditfield(app.IscTab, 'numeric');
app.EditField_18.Editable = 'off';
app.EditField_18.HorizontalAlignment = 'center';
app.EditField_18.FontName = 'Consolas';
app.EditField_18.FontSize = 14;
app.EditField_18.Position = [57 83 102 22];
% Create puLabel_5
app.puLabel_5 = uilabel(app.IscTab);
app.puLabel_5.HorizontalAlignment = 'center';
app.puLabel_5.FontName = 'Consolas';
app.puLabel_5.FontSize = 14;
app.puLabel_5.FontWeight = 'bold';
app.puLabel_5.Position = [164 85 25 18];
app.puLabel_5.Text = 'pu';
% Create PscTab
app.PscTab = uitab(app.TabGroup);
app.PscTab.Title = 'Psc';
app.PscTab.ForegroundColor = [0.6392 0.0784 0.1804];
% Create PscLabel
app.PscLabel = uilabel(app.PscTab);
app.PscLabel.FontName = 'Consolas';
app.PscLabel.FontSize = 14;
app.PscLabel.FontWeight = 'bold';
app.PscLabel.Position = [64 256 44 18];
app.PscLabel.Text = 'Psc =';
% Create SbLabel_2
app.SbLabel_2 = uilabel(app.PscTab);
app.SbLabel_2.HorizontalAlignment = 'center';
app.SbLabel_2.FontName = 'Consolas';
app.SbLabel_2.FontSize = 14;
app.SbLabel_2.FontWeight = 'bold';
app.SbLabel_2.Position = [117 247 25 18];
app.SbLabel_2.Text = 'Sb';
% Create PcsLabel
app.PcsLabel = uilabel(app.PscTab);
app.PcsLabel.HorizontalAlignment = 'center';
app.PcsLabel.VerticalAlignment = 'center';
app.PcsLabel.FontName = 'Consolas';
app.PcsLabel.FontSize = 14;
app.PcsLabel.FontWeight = 'bold';
app.PcsLabel.Position = [115 265 29 18];
app.PcsLabel.Text = 'Pcs';
% Create Label_18
app.Label_18 = uilabel(app.PscTab);
app.Label_18.HorizontalAlignment = 'center';
app.Label_18.VerticalAlignment = 'center';
app.Label_18.FontName = 'Consolas';
app.Label_18.FontSize = 14;
app.Label_18.FontWeight = 'bold';
app.Label_18.Position = [108 257 44 18];
app.Label_18.Text = '-----';
% Create WLabel_3
app.WLabel_3 = uilabel(app.PscTab);
app.WLabel_3.HorizontalAlignment = 'center';
app.WLabel_3.VerticalAlignment = 'center';
app.WLabel_3.FontName = 'Consolas';
app.WLabel_3.FontSize = 14;
app.WLabel_3.FontWeight = 'bold';
```

```matlab
app.WLabel_3.Position = [192 211 25 18];
app.WLabel_3.Text = 'W';
% Create WLabel_4
app.WLabel_4 = uilabel(app.PscTab);
app.WLabel_4.HorizontalAlignment = 'center';
app.WLabel_4.FontName = 'Consolas';
app.WLabel_4.FontSize = 14;
app.WLabel_4.FontWeight = 'bold';
app.WLabel_4.Position = [192 179 25 18];
app.WLabel_4.Text = 'W';
% Create Label_19
app.Label_19 = uilabel(app.PscTab);
app.Label_19.HorizontalAlignment = 'center';
app.Label_19.VerticalAlignment = 'center';
app.Label_19.FontName = 'Consolas';
app.Label_19.FontSize = 14;
app.Label_19.FontWeight = 'bold';
app.Label_19.Position = [8 197 207 18];
app.Label_19.Text = '= ----------------------';
% Create EditField_19
app.EditField_19 = uieditfield(app.PscTab, 'numeric');
app.EditField_19.Editable = 'off';
app.EditField_19.HorizontalAlignment = 'center';
app.EditField_19.FontName = 'Consolas';
app.EditField_19.FontSize = 14;
app.EditField_19.Position = [23 210 170 22];
% Create EditField_20
app.EditField_20 = uieditfield(app.PscTab, 'numeric');
app.EditField_20.Editable = 'off';
app.EditField_20.HorizontalAlignment = 'center';
app.EditField_20.FontName = 'Consolas';
app.EditField_20.FontSize = 14;
app.EditField_20.Position = [23 178 170 22];
% Create PscLabel_2
app.PscLabel_2 = uilabel(app.PscTab);
app.PscLabel_2.FontName = 'Consolas';
app.PscLabel_2.FontSize = 14;
app.PscLabel_2.FontWeight = 'bold';
app.PscLabel_2.Position = [18 135 52 18];
app.PscLabel_2.Text = 'Psc = ';
% Create EditField_21
app.EditField_21 = uieditfield(app.PscTab, 'numeric');
app.EditField_21.Editable = 'off';
app.EditField_21.HorizontalAlignment = 'center';
app.EditField_21.FontName = 'Consolas';
app.EditField_21.FontSize = 14;
app.EditField_21.Position = [61 133 102 22];
% Create puLabel_6
app.puLabel_6 = uilabel(app.PscTab);
app.puLabel_6.HorizontalAlignment = 'center';
app.puLabel_6.FontName = 'Consolas';
app.puLabel_6.FontSize = 14;
app.puLabel_6.FontWeight = 'bold';
app.puLabel_6.Position = [168 135 25 18];
app.puLabel_6.Text = 'pu';
% Create PerdidasdelconductorLabel
app.PerdidasdelconductorLabel = uilabel(app.PscTab);
app.PerdidasdelconductorLabel.BackgroundColor = [1 1 0.502];
app.PerdidasdelconductorLabel.HorizontalAlignment = 'center';
app.PerdidasdelconductorLabel.VerticalAlignment = 'center';
app.PerdidasdelconductorLabel.FontName = 'Consolas';
app.PerdidasdelconductorLabel.FontAngle = 'italic';
app.PerdidasdelconductorLabel.FontColor = [0.149 0.149 0.149];
app.PerdidasdelconductorLabel.Position = [32 87 151 15];
app.PerdidasdelconductorLabel.Text = 'Perdidas del conductor';
% Create YTab
app.YTab = uitab(app.TabGroup);
app.YTab.Title = 'Yθ';
app.YTab.ForegroundColor = [0.149 0.149 0.149];
% Create YLabel
app.YLabel = uilabel(app.YTab);
app.YLabel.FontName = 'Consolas';
```

```matlab
app.YLabel.FontSize = 14;
app.YLabel.FontWeight = 'bold';
app.YLabel.Position = [61 269 44 18];
app.YLabel.Text = 'Y0 = ';
% Create VocLabel_2
app.VocLabel_2 = uilabel(app.YTab);
app.VocLabel_2.HorizontalAlignment = 'center';
app.VocLabel_2.FontName = 'Consolas';
app.VocLabel_2.FontSize = 14;
app.VocLabel_2.FontWeight = 'bold';
app.VocLabel_2.Position = [112 260 29 18];
app.VocLabel_2.Text = 'Voc';
% Create IocLabel_2
app.IocLabel_2 = uilabel(app.YTab);
app.IocLabel_2.HorizontalAlignment = 'center';
app.IocLabel_2.VerticalAlignment = 'center';
app.IocLabel_2.FontName = 'Consolas';
app.IocLabel_2.FontSize = 14;
app.IocLabel_2.FontWeight = 'bold';
app.IocLabel_2.Position = [112 278 29 18];
app.IocLabel_2.Text = 'Ioc';
% Create Label_21
app.Label_21 = uilabel(app.YTab);
app.Label_21.HorizontalAlignment = 'center';
app.Label_21.VerticalAlignment = 'center';
app.Label_21.FontName = 'Consolas';
app.Label_21.FontSize = 14;
app.Label_21.FontWeight = 'bold';
app.Label_21.Position = [105 270 44 18];
app.Label_21.Text = '-----';
% Create Label_24
app.Label_24 = uilabel(app.YTab);
app.Label_24.HorizontalAlignment = 'center';
app.Label_24.VerticalAlignment = 'center';
app.Label_24.FontName = 'Consolas';
app.Label_24.FontSize = 14;
app.Label_24.FontWeight = 'bold';
app.Label_24.Position = [188 196 25 18];
app.Label_24.Text = '';
% Create Label_25
app.Label_25 = uilabel(app.YTab);
app.Label_25.HorizontalAlignment = 'center';
app.Label_25.FontName = 'Consolas';
app.Label_25.FontSize = 14;
app.Label_25.FontWeight = 'bold';
app.Label_25.Position = [188 164 25 18];
app.Label_25.Text = '';
% Create Label_22
app.Label_22 = uilabel(app.YTab);
app.Label_22.HorizontalAlignment = 'center';
app.Label_22.VerticalAlignment = 'center';
app.Label_22.FontName = 'Consolas';
app.Label_22.FontSize = 14;
app.Label_22.FontWeight = 'bold';
app.Label_22.Position = [4 182 207 18];
app.Label_22.Text = '= ----------------------';
% Create EditField_22
app.EditField_22 = uieditfield(app.YTab, 'numeric');
app.EditField_22.Editable = 'off';
app.EditField_22.HorizontalAlignment = 'center';
app.EditField_22.FontName = 'Consolas';
app.EditField_22.FontSize = 14;
app.EditField_22.Position = [19 195 170 22];
% Create EditField_23
app.EditField_23 = uieditfield(app.YTab, 'numeric');
app.EditField_23.Editable = 'off';
app.EditField_23.HorizontalAlignment = 'center';
app.EditField_23.FontName = 'Consolas';
app.EditField_23.FontSize = 14;
app.EditField_23.Position = [19 163 170 22];
% Create YLabel_2
app.YLabel_2 = uilabel(app.YTab);
```

```matlab
app.YLabel_2.FontName = 'Consolas';
app.YLabel_2.FontSize = 14;
app.YLabel_2.FontWeight = 'bold';
app.YLabel_2.Position = [28 85 44 18];
app.YLabel_2.Text = 'Yθ = ';
% Create EditField_24
app.EditField_24 = uieditfield(app.YTab, 'numeric');
app.EditField_24.Editable = 'off';
app.EditField_24.HorizontalAlignment = 'center';
app.EditField_24.FontName = 'Consolas';
app.EditField_24.FontSize = 14;
app.EditField_24.Position = [61 83 102 22];
% Create puLabel_7
app.puLabel_7 = uilabel(app.YTab);
app.puLabel_7.HorizontalAlignment = 'center';
app.puLabel_7.FontName = 'Consolas';
app.puLabel_7.FontSize = 14;
app.puLabel_7.FontWeight = 'bold';
app.puLabel_7.Position = [168 85 25 18];
app.puLabel_7.Text = 'pu';
% Create PocTab_2
app.PocTab_2 = uitab(app.TabGroup);
app.PocTab_2.Title = 'Poc θ';
% Create PocVocIoccosLabel
app.PocVocIoccosLabel = uilabel(app.PocTab_2);
app.PocVocIoccosLabel.FontName = 'Consolas';
app.PocVocIoccosLabel.FontSize = 14;
app.PocVocIoccosLabel.FontWeight = 'bold';
app.PocVocIoccosLabel.Position = [14 268 191 18];
app.PocVocIoccosLabel.Text = 'Poc = Voc * Ioc * cos(θ)';
% Create PocLabel_2
app.PocLabel_2 = uilabel(app.PocTab_2);
app.PocLabel_2.HorizontalAlignment = 'center';
app.PocLabel_2.VerticalAlignment = 'center';
app.PocLabel_2.FontName = 'Consolas';
app.PocLabel_2.FontSize = 14;
app.PocLabel_2.FontWeight = 'bold';
app.PocLabel_2.Position = [135 209 29 18];
app.PocLabel_2.Text = 'Poc';
% Create VocIocLabel
app.VocIocLabel = uilabel(app.PocTab_2);
app.VocIocLabel.HorizontalAlignment = 'center';
app.VocIocLabel.FontName = 'Consolas';
app.VocIocLabel.FontSize = 14;
app.VocIocLabel.FontWeight = 'bold';
app.VocIocLabel.Position = [112 186 75 18];
app.VocIocLabel.Text = 'Voc * Ioc';
% Create cos1Label
app.cos1Label = uilabel(app.PocTab_2);
app.cos1Label.HorizontalAlignment = 'center';
app.cos1Label.VerticalAlignment = 'center';
app.cos1Label.FontName = 'Consolas';
app.cos1Label.FontSize = 14;
app.cos1Label.FontWeight = 'bold';
app.cos1Label.Position = [6 199 207 18];
app.cos1Label.Text = 'θ = -cos^-1(------------)';
% Create Label_28
app.Label_28 = uilabel(app.PocTab_2);
app.Label_28.FontName = 'Consolas';
app.Label_28.FontSize = 14;
app.Label_28.FontWeight = 'bold';
app.Label_28.Position = [44 32 36 18];
app.Label_28.Text = 'θ = ';
% Create EditField_27
app.EditField_27 = uieditfield(app.PocTab_2, 'numeric');
app.EditField_27.Editable = 'off';
app.EditField_27.HorizontalAlignment = 'center';
app.EditField_27.FontName = 'Consolas';
app.EditField_27.FontSize = 14;
app.EditField_27.Position = [79 30 80 22];
% Create Label_30
app.Label_30 = uilabel(app.PocTab_2);
```

```matlab
app.Label_30.FontName = 'Consolas';
app.Label_30.FontSize = 14;
app.Label_30.FontWeight = 'bold';
app.Label_30.Position = [164 32 25 18];
app.Label_30.Text = '°';
% Create cos1Label_2
app.cos1Label_2 = uilabel(app.PocTab_2);
app.cos1Label_2.HorizontalAlignment = 'center';
app.cos1Label_2.VerticalAlignment = 'center';
app.cos1Label_2.FontName = 'Consolas';
app.cos1Label_2.FontSize = 14;
app.cos1Label_2.FontWeight = 'bold';
app.cos1Label_2.Position = [3 114 214 18];
app.cos1Label_2.Text = 'θ = -cos^-1(-------------)';
% Create EditField_28
app.EditField_28 = uieditfield(app.PocTab_2, 'numeric');
app.EditField_28.Editable = 'off';
app.EditField_28.HorizontalAlignment = 'center';
app.EditField_28.FontName = 'Consolas';
app.EditField_28.FontSize = 14;
app.EditField_28.Position = [103 124 97 22];
% Create EditField_29
app.EditField_29 = uieditfield(app.PocTab_2, 'numeric');
app.EditField_29.Editable = 'off';
app.EditField_29.HorizontalAlignment = 'center';
app.EditField_29.FontName = 'Consolas';
app.EditField_29.FontSize = 14;
app.EditField_29.Position = [103 96 41 22];
% Create Label_29
app.Label_29 = uilabel(app.PocTab_2);
app.Label_29.HorizontalAlignment = 'center';
app.Label_29.FontName = 'Consolas';
app.Label_29.FontSize = 14;
app.Label_29.FontWeight = 'bold';
app.Label_29.Position = [137 97 25 18];
app.Label_29.Text = '*';
% Create EditField_30
app.EditField_30 = uieditfield(app.PocTab_2, 'numeric');
app.EditField_30.Editable = 'off';
app.EditField_30.HorizontalAlignment = 'center';
app.EditField_30.FontName = 'Consolas';
app.EditField_30.FontSize = 14;
app.EditField_30.Position = [157 95 48 22];
% Create YTab_2
app.YTab_2 = uitab(app.TabGroup);
app.YTab_2.Title = 'Y';
app.YTab_2.BackgroundColor = [0.9412 0.9412 0.9412];
app.YTab_2.ForegroundColor = [1 0.502 0.502];
% Create YLabel_3
app.YLabel_3 = uilabel(app.YTab_2);
app.YLabel_3.FontName = 'Consolas';
app.YLabel_3.FontSize = 14;
app.YLabel_3.FontWeight = 'bold';
app.YLabel_3.Position = [11 172 36 18];
app.YLabel_3.Text = 'Y = ';
% Create EditField_38
app.EditField_38 = uieditfield(app.YTab_2, 'numeric');
app.EditField_38.Editable = 'off';
app.EditField_38.HorizontalAlignment = 'center';
app.EditField_38.FontName = 'Consolas';
app.EditField_38.FontSize = 14;
app.EditField_38.Position = [46 170 61 22];
% Create LLabel
app.LLabel = uilabel(app.YTab_2);
app.LLabel.HorizontalAlignment = 'center';
app.LLabel.FontName = 'Consolas';
app.LLabel.FontSize = 14;
app.LLabel.FontWeight = 'bold';
app.LLabel.Position = [106 172 25 18];
app.LLabel.Text = 'L';
% Create EditField_39
app.EditField_39 = uieditfield(app.YTab_2, 'numeric');
```

```matlab
app.EditField_39.Editable = 'off';
app.EditField_39.HorizontalAlignment = 'center';
app.EditField_39.FontName = 'Consolas';
app.EditField_39.FontSize = 14;
app.EditField_39.Position = [130 170 61 22];
% Create Label_38
app.Label_38 = uilabel(app.YTab_2);
app.Label_38.FontName = 'Consolas';
app.Label_38.FontSize = 14;
app.Label_38.FontWeight = 'bold';
app.Label_38.Position = [190 172 11 18];
app.Label_38.Text = '°';
% Create ZeTab
app.ZeTab = uitab(app.TabGroup);
app.ZeTab.Title = 'Ze';
% Create ZeLabel
app.ZeLabel = uilabel(app.ZeTab);
app.ZeLabel.FontName = 'Consolas';
app.ZeLabel.FontSize = 14;
app.ZeLabel.FontWeight = 'bold';
app.ZeLabel.Position = [69 270 44 18];
app.ZeLabel.Text = 'Ze = ';
% Create IscLabel_2
app.IscLabel_2 = uilabel(app.ZeTab);
app.IscLabel_2.HorizontalAlignment = 'center';
app.IscLabel_2.FontName = 'Consolas';
app.IscLabel_2.FontSize = 14;
app.IscLabel_2.FontWeight = 'bold';
app.IscLabel_2.Position = [112 260 29 18];
app.IscLabel_2.Text = 'Isc';
% Create VscLabel_2
app.VscLabel_2 = uilabel(app.ZeTab);
app.VscLabel_2.HorizontalAlignment = 'center';
app.VscLabel_2.VerticalAlignment = 'center';
app.VscLabel_2.FontName = 'Consolas';
app.VscLabel_2.FontSize = 14;
app.VscLabel_2.FontWeight = 'bold';
app.VscLabel_2.Position = [112 278 29 18];
app.VscLabel_2.Text = 'Vsc';
% Create Label_31
app.Label_31 = uilabel(app.ZeTab);
app.Label_31.HorizontalAlignment = 'center';
app.Label_31.VerticalAlignment = 'center';
app.Label_31.FontName = 'Consolas';
app.Label_31.FontSize = 14;
app.Label_31.FontWeight = 'bold';
app.Label_31.Position = [105 270 44 18];
app.Label_31.Text = '-----';
% Create Label_32
app.Label_32 = uilabel(app.ZeTab);
app.Label_32.HorizontalAlignment = 'center';
app.Label_32.VerticalAlignment = 'center';
app.Label_32.FontName = 'Consolas';
app.Label_32.FontSize = 14;
app.Label_32.FontWeight = 'bold';
app.Label_32.Position = [4 181 199 18];
app.Label_32.Text = '= ---------------------';
% Create EditField_31
app.EditField_31 = uieditfield(app.ZeTab, 'numeric');
app.EditField_31.Editable = 'off';
app.EditField_31.HorizontalAlignment = 'center';
app.EditField_31.FontName = 'Consolas';
app.EditField_31.FontSize = 14;
app.EditField_31.Position = [23 193 170 22];
% Create EditField_32
app.EditField_32 = uieditfield(app.ZeTab, 'numeric');
app.EditField_32.Editable = 'off';
app.EditField_32.HorizontalAlignment = 'center';
app.EditField_32.FontName = 'Consolas';
app.EditField_32.FontSize = 14;
app.EditField_32.Position = [23 161 170 22];
% Create ZeLabel_2
```

```matlab
app.ZeLabel_2 = uilabel(app.ZeTab);
app.ZeLabel_2.FontName = 'Consolas';
app.ZeLabel_2.FontSize = 14;
app.ZeLabel_2.FontWeight = 'bold';
app.ZeLabel_2.Position = [23 85 44 18];
app.ZeLabel_2.Text = 'Ze = ';
% Create EditField_33
app.EditField_33 = uieditfield(app.ZeTab, 'numeric');
app.EditField_33.Editable = 'off';
app.EditField_33.HorizontalAlignment = 'center';
app.EditField_33.FontName = 'Consolas';
app.EditField_33.FontSize = 14;
app.EditField_33.Position = [57 83 102 22];
% Create puLabel_8
app.puLabel_8 = uilabel(app.ZeTab);
app.puLabel_8.HorizontalAlignment = 'center';
app.puLabel_8.FontName = 'Consolas';
app.puLabel_8.FontSize = 14;
app.puLabel_8.FontWeight = 'bold';
app.puLabel_8.Position = [164 85 25 18];
app.puLabel_8.Text = 'pu';
% Create ZeTab_2
app.ZeTab_2 = uitab(app.TabGroup);
app.ZeTab_2.Title = 'Ze θ';
% Create PscVscIsccosLabel
app.PscVscIsccosLabel = uilabel(app.ZeTab_2);
app.PscVscIsccosLabel.FontName = 'Consolas';
app.PscVscIsccosLabel.FontSize = 14;
app.PscVscIsccosLabel.FontWeight = 'bold';
app.PscVscIsccosLabel.Position = [14 268 191 18];
app.PscVscIsccosLabel.Text = 'Psc = Vsc * Isc * cos(θ)';
% Create PscLabel_3
app.PscLabel_3 = uilabel(app.ZeTab_2);
app.PscLabel_3.HorizontalAlignment = 'center';
app.PscLabel_3.VerticalAlignment = 'center';
app.PscLabel_3.FontName = 'Consolas';
app.PscLabel_3.FontSize = 14;
app.PscLabel_3.FontWeight = 'bold';
app.PscLabel_3.Position = [135 209 29 18];
app.PscLabel_3.Text = 'Psc';
% Create VscIscLabel
app.VscIscLabel = uilabel(app.ZeTab_2);
app.VscIscLabel.HorizontalAlignment = 'center';
app.VscIscLabel.FontName = 'Consolas';
app.VscIscLabel.FontSize = 14;
app.VscIscLabel.FontWeight = 'bold';
app.VscIscLabel.Position = [112 186 75 18];
app.VscIscLabel.Text = 'Vsc * Isc';
% Create cos1Label_3
app.cos1Label_3 = uilabel(app.ZeTab_2);
app.cos1Label_3.HorizontalAlignment = 'center';
app.cos1Label_3.VerticalAlignment = 'center';
app.cos1Label_3.FontName = 'Consolas';
app.cos1Label_3.FontSize = 14;
app.cos1Label_3.FontWeight = 'bold';
app.cos1Label_3.Position = [10 199 199 18];
app.cos1Label_3.Text = 'θ = cos^-1(-------------)';
% Create Label_33
app.Label_33 = uilabel(app.ZeTab_2);
app.Label_33.FontName = 'Consolas';
app.Label_33.FontSize = 14;
app.Label_33.FontWeight = 'bold';
app.Label_33.Position = [44 32 36 18];
app.Label_33.Text = 'θ = ';
% Create EditField_34
app.EditField_34 = uieditfield(app.ZeTab_2, 'numeric');
app.EditField_34.Editable = 'off';
app.EditField_34.HorizontalAlignment = 'center';
app.EditField_34.FontName = 'Consolas';
app.EditField_34.FontSize = 14;
app.EditField_34.Position = [79 30 80 22];
% Create Label_34
```

```matlab
app.Label_34 = uilabel(app.ZeTab_2);
app.Label_34.FontName = 'Consolas';
app.Label_34.FontSize = 14;
app.Label_34.FontWeight = 'bold';
app.Label_34.Position = [164 32 25 18];
app.Label_34.Text = '°';
% Create cos1Label_4
app.cos1Label_4 = uilabel(app.ZeTab_2);
app.cos1Label_4.HorizontalAlignment = 'center';
app.cos1Label_4.VerticalAlignment = 'center';
app.cos1Label_4.FontName = 'Consolas';
app.cos1Label_4.FontSize = 14;
app.cos1Label_4.FontWeight = 'bold';
app.cos1Label_4.Position = [3 114 214 18];
app.cos1Label_4.Text = 'θ = cos^-1(--------------)';
% Create EditField_35
app.EditField_35 = uieditfield(app.ZeTab_2, 'numeric');
app.EditField_35.Editable = 'off';
app.EditField_35.HorizontalAlignment = 'center';
app.EditField_35.FontName = 'Consolas';
app.EditField_35.FontSize = 14;
app.EditField_35.Position = [103 124 97 22];
% Create EditField_36
app.EditField_36 = uieditfield(app.ZeTab_2, 'numeric');
app.EditField_36.Editable = 'off';
app.EditField_36.HorizontalAlignment = 'center';
app.EditField_36.FontName = 'Consolas';
app.EditField_36.FontSize = 14;
app.EditField_36.Position = [95 96 49 22];
% Create Label_35
app.Label_35 = uilabel(app.ZeTab_2);
app.Label_35.HorizontalAlignment = 'center';
app.Label_35.FontName = 'Consolas';
app.Label_35.FontSize = 14;
app.Label_35.FontWeight = 'bold';
app.Label_35.Position = [137 97 25 18];
app.Label_35.Text = '*';
% Create EditField_37
app.EditField_37 = uieditfield(app.ZeTab_2, 'numeric');
app.EditField_37.Editable = 'off';
app.EditField_37.HorizontalAlignment = 'center';
app.EditField_37.FontName = 'Consolas';
app.EditField_37.FontSize = 14;
app.EditField_37.Position = [157 95 48 22];
% Create ZTab
app.ZTab = uitab(app.TabGroup);
app.ZTab.Title = 'Z';
app.ZTab.ForegroundColor = [1 0.502 0.502];
% Create ZLabel
app.ZLabel = uilabel(app.ZTab);
app.ZLabel.FontName = 'Consolas';
app.ZLabel.FontSize = 14;
app.ZLabel.FontWeight = 'bold';
app.ZLabel.Position = [11 172 36 18];
app.ZLabel.Text = 'Z = ';
% Create EditField_40
app.EditField_40 = uieditfield(app.ZTab, 'numeric');
app.EditField_40.Editable = 'off';
app.EditField_40.HorizontalAlignment = 'center';
app.EditField_40.FontName = 'Consolas';
app.EditField_40.FontSize = 14;
app.EditField_40.Position = [46 170 61 22];
% Create LLabel_2
app.LLabel_2 = uilabel(app.ZTab);
app.LLabel_2.HorizontalAlignment = 'center';
app.LLabel_2.FontName = 'Consolas';
app.LLabel_2.FontSize = 14;
app.LLabel_2.FontWeight = 'bold';
app.LLabel_2.Position = [106 172 25 18];
app.LLabel_2.Text = 'L';
% Create EditField_41
app.EditField_41 = uieditfield(app.ZTab, 'numeric');
```

```matlab
app.EditField_41.Editable = 'off';
app.EditField_41.HorizontalAlignment = 'center';
app.EditField_41.FontName = 'Consolas';
app.EditField_41.FontSize = 14;
app.EditField_41.Position = [130 170 61 22];
% Create Label_39
app.Label_39 = uilabel(app.ZTab);
app.Label_39.FontName = 'Consolas';
app.Label_39.FontSize = 14;
app.Label_39.FontWeight = 'bold';
app.Label_39.Position = [190 172 11 18];
app.Label_39.Text = '°';
% Create PLENACARGAPanel
app.PLENACARGAPanel = uipanel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
app.PLENACARGAPanel.ForegroundColor = [0.6392 0.0784 0.1804];
app.PLENACARGAPanel.TitlePosition = 'centertop';
app.PLENACARGAPanel.Title = 'PLENA CARGA';
app.PLENACARGAPanel.FontWeight = 'bold';
app.PLENACARGAPanel.Position = [766 44 304 181];
% Create PotenciaaparenteEditFieldLabel
app.PotenciaaparenteEditFieldLabel = uilabel(app.PLENACARGAPanel);
app.PotenciaaparenteEditFieldLabel.HorizontalAlignment = 'right';
app.PotenciaaparenteEditFieldLabel.FontName = 'Consolas';
app.PotenciaaparenteEditFieldLabel.FontWeight = 'bold';
app.PotenciaaparenteEditFieldLabel.Position = [14 131 118 15];
app.PotenciaaparenteEditFieldLabel.Text = 'Potencia aparente';
% Create PotenciaaparenteEditField
app.PotenciaaparenteEditField = uieditfield(app.PLENACARGAPanel, 'numeric');
app.PotenciaaparenteEditField.Editable = 'off';
app.PotenciaaparenteEditField.HorizontalAlignment = 'center';
app.PotenciaaparenteEditField.FontName = 'Consolas';
app.PotenciaaparenteEditField.FontWeight = 'bold';
app.PotenciaaparenteEditField.Position = [147 127 117 22];
% Create FactordepotenciaEditFieldLabel
app.FactordepotenciaEditFieldLabel = uilabel(app.PLENACARGAPanel);
app.FactordepotenciaEditFieldLabel.HorizontalAlignment = 'right';
app.FactordepotenciaEditFieldLabel.FontName = 'Consolas';
app.FactordepotenciaEditFieldLabel.FontWeight = 'bold';
app.FactordepotenciaEditFieldLabel.Position = [14 98 124 15];
app.FactordepotenciaEditFieldLabel.Text = 'Factor de potencia';
% Create FactordepotenciaEditField
app.FactordepotenciaEditField = uieditfield(app.PLENACARGAPanel, 'numeric');
app.FactordepotenciaEditField.HorizontalAlignment = 'center';
app.FactordepotenciaEditField.FontName = 'Consolas';
app.FactordepotenciaEditField.FontWeight = 'bold';
app.FactordepotenciaEditField.Position = [153 94 111 22];
% Create VoltajeEditField_3Label
app.VoltajeEditField_3Label = uilabel(app.PLENACARGAPanel);
app.VoltajeEditField_3Label.HorizontalAlignment = 'right';
app.VoltajeEditField_3Label.FontName = 'Consolas';
app.VoltajeEditField_3Label.FontWeight = 'bold';
app.VoltajeEditField_3Label.Position = [67 67 52 15];
app.VoltajeEditField_3Label.Text = 'Voltaje';
% Create VoltajeEditField_3
app.VoltajeEditField_3 = uieditfield(app.PLENACARGAPanel, 'numeric');
app.VoltajeEditField_3.Editable = 'off';
app.VoltajeEditField_3.HorizontalAlignment = 'center';
app.VoltajeEditField_3.FontName = 'Consolas';
app.VoltajeEditField_3.FontWeight = 'bold';
app.VoltajeEditField_3.Position = [134 63 130 22];
% Create CorrienteEditField_3Label
app.CorrienteEditField_3Label = uilabel(app.PLENACARGAPanel);
app.CorrienteEditField_3Label.HorizontalAlignment = 'right';
app.CorrienteEditField_3Label.FontName = 'Consolas';
app.CorrienteEditField_3Label.FontWeight = 'bold';
app.CorrienteEditField_3Label.Position = [54 38 65 15];
app.CorrienteEditField_3Label.Text = 'Corriente';
% Create CorrienteEditField_3
app.CorrienteEditField_3 = uieditfield(app.PLENACARGAPanel, 'numeric');
app.CorrienteEditField_3.Editable = 'off';
app.CorrienteEditField_3.HorizontalAlignment = 'center';
app.CorrienteEditField_3.FontName = 'Consolas';
```

```matlab
            app.CorrienteEditField_3.FontWeight = 'bold';
            app.CorrienteEditField_3.Position = [134 34 130 22];
            % Create KVALabel_2
            app.KVALabel_2 = uilabel(app.PLENACARGAPanel);
            app.KVALabel_2.HorizontalAlignment = 'center';
            app.KVALabel_2.FontWeight = 'bold';
            app.KVALabel_2.Position = [263 131 31 15];
            app.KVALabel_2.Text = 'KVA';
            % Create Label_40
            app.Label_40 = uilabel(app.PLENACARGAPanel);
            app.Label_40.HorizontalAlignment = 'center';
            app.Label_40.FontWeight = 'bold';
            app.Label_40.Position = [263 98 25 15];
            app.Label_40.Text = '';
            % Create VLabel_9
            app.VLabel_9 = uilabel(app.PLENACARGAPanel);
            app.VLabel_9.HorizontalAlignment = 'center';
            app.VLabel_9.FontWeight = 'bold';
            app.VLabel_9.Position = [263 67 23 15];
            app.VLabel_9.Text = 'V';
            % Create ALabel_7
            app.ALabel_7 = uilabel(app.PLENACARGAPanel);
            app.ALabel_7.HorizontalAlignment = 'center';
            app.ALabel_7.FontWeight = 'bold';
            app.ALabel_7.Position = [262 38 25 15];
            app.ALabel_7.Text = 'A';
            % Create Label_51
            app.Label_51 = uilabel(app.PLENACARGAPanel);
            app.Label_51.HorizontalAlignment = 'center';
            app.Label_51.FontWeight = 'bold';
            app.Label_51.Position = [262 98 25 15];
            app.Label_51.Text = '(-)';
            % Create CONTROLESButtonGroup
            app.CONTROLESButtonGroup =
uibuttongroup(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.CONTROLESButtonGroup.ForegroundColor = [1 0.102 0.102];
            app.CONTROLESButtonGroup.TitlePosition = 'centertop';
            app.CONTROLESButtonGroup.Title = 'CONTROLES';
            app.CONTROLESButtonGroup.FontWeight = 'bold';
            app.CONTROLESButtonGroup.FontSize = 14;
            app.CONTROLESButtonGroup.Position = [1081 153 140 300];
            % Create LimpiarCamposSwitchLabel
            app.LimpiarCamposSwitchLabel = uilabel(app.CONTROLESButtonGroup);
            app.LimpiarCamposSwitchLabel.HorizontalAlignment = 'center';
            app.LimpiarCamposSwitchLabel.FontName = 'Century Gothic';
            app.LimpiarCamposSwitchLabel.FontWeight = 'bold';
            app.LimpiarCamposSwitchLabel.FontColor = [0.149 0.149 0.149];
            app.LimpiarCamposSwitchLabel.Position = [16 61 100 15];
            app.LimpiarCamposSwitchLabel.Text = 'Limpiar Campos';
            % Create LimpiarCamposSwitch
            app.LimpiarCamposSwitch = uiswitch(app.CONTROLESButtonGroup, 'rocker');
            app.LimpiarCamposSwitch.ValueChangedFcn = createCallbackFcn(app,
@LimpiarCamposSwitchValueChanged, true);
            app.LimpiarCamposSwitch.FontName = 'Century Gothic';
            app.LimpiarCamposSwitch.FontWeight = 'bold';
            app.LimpiarCamposSwitch.FontColor = [0.149 0.149 0.149];
            app.LimpiarCamposSwitch.Position = [55 112 20 45];
            % Create CalcularButton
            app.CalcularButton = uibutton(app.CONTROLESButtonGroup, 'push');
            app.CalcularButton.ButtonPushedFcn = createCallbackFcn(app,
@CalcularButtonPushed, true);
            app.CalcularButton.FontName = 'Century Gothic';
            app.CalcularButton.FontSize = 14;
            app.CalcularButton.FontWeight = 'bold';
            app.CalcularButton.Position = [20 214 100 26];
            app.CalcularButton.Text = 'Calcular';
            % Create EFICIENCIAPanel
            app.EFICIENCIAPanel = uipanel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.EFICIENCIAPanel.ForegroundColor = [0.6392 0.0784 0.1804];
            app.EFICIENCIAPanel.TitlePosition = 'centertop';
            app.EFICIENCIAPanel.Title = 'EFICIENCIA';
            app.EFICIENCIAPanel.FontWeight = 'bold';
```

```matlab
            app.EFICIENCIAPanel.Position = [275 44 244 181];
            % Create Label_41
            app.Label_41 = uilabel(app.EFICIENCIAPanel);
            app.Label_41.HorizontalAlignment = 'center';
            app.Label_41.FontWeight = 'bold';
            app.Label_41.Position = [263 98 25 15];
            app.Label_41.Text = '';
            % Create Label_44
            app.Label_44 = uilabel(app.EFICIENCIAPanel);
            app.Label_44.HorizontalAlignment = 'center';
            app.Label_44.FontWeight = 'bold';
            app.Label_44.Position = [186 38 25 15];
            app.Label_44.Text = '%';
            % Create EditField_44Label
            app.EditField_44Label = uilabel(app.EFICIENCIAPanel);
            app.EditField_44Label.HorizontalAlignment = 'right';
            app.EditField_44Label.FontName = 'Consolas';
            app.EditField_44Label.FontWeight = 'bold';
            app.EditField_44Label.Position = [33 38 25 15];
            app.EditField_44Label.Text = 'η =';
            % Create EditField_44
            app.EditField_44 = uieditfield(app.EFICIENCIAPanel, 'numeric');
            app.EditField_44.Editable = 'off';
            app.EditField_44.HorizontalAlignment = 'center';
            app.EditField_44.FontName = 'Consolas';
            app.EditField_44.FontWeight = 'bold';
            app.EditField_44.Position = [73 34 115 22];
            % Create SFPLabel
            app.SFPLabel = uilabel(app.EFICIENCIAPanel);
            app.SFPLabel.HorizontalAlignment = 'center';
            app.SFPLabel.VerticalAlignment = 'center';
            app.SFPLabel.FontName = 'Consolas';
            app.SFPLabel.FontWeight = 'bold';
            app.SFPLabel.Position = [89 115 45 15];
            app.SFPLabel.Text = 'S * FP';
            % Create SFPPcobrePncleoLabel
            app.SFPPcobrePncleoLabel = uilabel(app.EFICIENCIAPanel);
            app.SFPPcobrePncleoLabel.HorizontalAlignment = 'center';
            app.SFPPcobrePncleoLabel.FontName = 'Consolas';
            app.SFPPcobrePncleoLabel.FontWeight = 'bold';
            app.SFPPcobrePncleoLabel.Position = [34 94 157 15];
            app.SFPPcobrePncleoLabel.Text = '(S*FP)+(Pcobre+Pnúcleo)';
            % Create Label_45
            app.Label_45 = uilabel(app.EFICIENCIAPanel);
            app.Label_45.VerticalAlignment = 'center';
            app.Label_45.FontName = 'Consolas';
            app.Label_45.FontSize = 14;
            app.Label_45.FontWeight = 'bold';
            app.Label_45.Position = [1 107 246 18];
            app.Label_45.Text = 'η = ------------------- *100 ';
            % Create Label_46
            app.Label_46 = uilabel(app.EFICIENCIAPanel);
            app.Label_46.HorizontalAlignment = 'center';
            app.Label_46.FontSize = 36;
            app.Label_46.Position = [182 94 25 47];
            app.Label_46.Text = ')';
            % Create Label_47
            app.Label_47 = uilabel(app.EFICIENCIAPanel);
            app.Label_47.HorizontalAlignment = 'center';
            app.Label_47.FontSize = 36;
            app.Label_47.Position = [19 94 25 47];
            app.Label_47.Text = '(';
            % Create REGULACINDEVOLTAJEPanel
            app.REGULACINDEVOLTAJEPanel =
uipanel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.REGULACINDEVOLTAJEPanel.ForegroundColor = [0.6392 0.0784 0.1804];
            app.REGULACINDEVOLTAJEPanel.TitlePosition = 'centertop';
            app.REGULACINDEVOLTAJEPanel.Title = 'REGULACIÓN DE VOLTAJE';
            app.REGULACINDEVOLTAJEPanel.FontWeight = 'bold';
            app.REGULACINDEVOLTAJEPanel.Position = [518 44 244 181];
            % Create V1I2ZV2Label
            app.V1I2ZV2Label = uilabel(app.REGULACINDEVOLTAJEPanel);
```

```matlab
app.V1I2ZV2Label.FontName = 'Consolas';
app.V1I2ZV2Label.FontSize = 14;
app.V1I2ZV2Label.FontWeight = 'bold';
app.V1I2ZV2Label.Position = [51 113 129 18];
app.V1I2ZV2Label.Text = 'V1 = I2 * Z + V2';
% Create I2Label
app.I2Label = uilabel(app.REGULACINDEVOLTAJEPanel);
app.I2Label.FontName = 'Consolas';
app.I2Label.FontSize = 14;
app.I2Label.FontWeight = 'bold';
app.I2Label.Position = [27 81 44 18];
app.I2Label.Text = 'I2 = ';
% Create EditField_42
app.EditField_42 = uieditfield(app.REGULACINDEVOLTAJEPanel, 'numeric');
app.EditField_42.Editable = 'off';
app.EditField_42.HorizontalAlignment = 'center';
app.EditField_42.FontName = 'Consolas';
app.EditField_42.FontSize = 14;
app.EditField_42.Position = [70 79 53 22];
% Create LLabel_3
app.LLabel_3 = uilabel(app.REGULACINDEVOLTAJEPanel);
app.LLabel_3.HorizontalAlignment = 'center';
app.LLabel_3.FontName = 'Consolas';
app.LLabel_3.FontSize = 14;
app.LLabel_3.FontWeight = 'bold';
app.LLabel_3.Position = [122 81 25 18];
app.LLabel_3.Text = 'L';
% Create EditField_43
app.EditField_43 = uieditfield(app.REGULACINDEVOLTAJEPanel, 'numeric');
app.EditField_43.Editable = 'off';
app.EditField_43.HorizontalAlignment = 'center';
app.EditField_43.FontName = 'Consolas';
app.EditField_43.FontSize = 14;
app.EditField_43.Position = [146 79 59 22];
% Create TomandoV2Label
app.TomandoV2Label = uilabel(app.REGULACINDEVOLTAJEPanel);
app.TomandoV2Label.HorizontalAlignment = 'center';
app.TomandoV2Label.VerticalAlignment = 'center';
app.TomandoV2Label.FontName = 'Consolas';
app.TomandoV2Label.FontWeight = 'bold';
app.TomandoV2Label.FontAngle = 'italic';
app.TomandoV2Label.FontColor = [0.149 0.149 0.149];
app.TomandoV2Label.Position = [80 137 71 15];
app.TomandoV2Label.Text = 'Tomando V2';
% Create V1EditFieldLabel
app.V1EditFieldLabel = uilabel(app.REGULACINDEVOLTAJEPanel);
app.V1EditFieldLabel.HorizontalAlignment = 'right';
app.V1EditFieldLabel.FontName = 'Consolas';
app.V1EditFieldLabel.FontWeight = 'bold';
app.V1EditFieldLabel.Position = [23 49 32 15];
app.V1EditFieldLabel.Text = 'V1 =';
% Create V1EditField
app.V1EditField = uieditfield(app.REGULACINDEVOLTAJEPanel, 'numeric');
app.V1EditField.Editable = 'off';
app.V1EditField.HorizontalAlignment = 'center';
app.V1EditField.FontName = 'Consolas';
app.V1EditField.FontWeight = 'bold';
app.V1EditField.Position = [70 45 53 22];
% Create RVEditFieldLabel
app.RVEditFieldLabel = uilabel(app.REGULACINDEVOLTAJEPanel);
app.RVEditFieldLabel.HorizontalAlignment = 'right';
app.RVEditFieldLabel.FontName = 'Consolas';
app.RVEditFieldLabel.FontWeight = 'bold';
app.RVEditFieldLabel.Position = [23 20 32 15];
app.RVEditFieldLabel.Text = 'RV =';
% Create RVEditField
app.RVEditField = uieditfield(app.REGULACINDEVOLTAJEPanel, 'numeric');
app.RVEditField.Editable = 'off';
app.RVEditField.HorizontalAlignment = 'center';
app.RVEditField.FontName = 'Consolas';
app.RVEditField.FontWeight = 'bold';
app.RVEditField.Position = [70 16 115 22];
```

```matlab
            % Create Label_43
            app.Label_43 = uilabel(app.REGULACINDEVOLTAJEPanel);
            app.Label_43.HorizontalAlignment = 'center';
            app.Label_43.FontWeight = 'bold';
            app.Label_43.Position = [183 20 25 15];
            app.Label_43.Text = '%';
            % Create VLabel_11
            app.VLabel_11 = uilabel(app.REGULACINDEVOLTAJEPanel);
            app.VLabel_11.HorizontalAlignment = 'center';
            app.VLabel_11.FontWeight = 'bold';
            app.VLabel_11.Position = [204 49 25 15];
            app.VLabel_11.Text = '° V';
            % Create LLabel_4
            app.LLabel_4 = uilabel(app.REGULACINDEVOLTAJEPanel);
            app.LLabel_4.HorizontalAlignment = 'center';
            app.LLabel_4.FontName = 'Consolas';
            app.LLabel_4.FontSize = 14;
            app.LLabel_4.FontWeight = 'bold';
            app.LLabel_4.Position = [122 47 25 18];
            app.LLabel_4.Text = 'L';
            % Create EditField_45
            app.EditField_45 = uieditfield(app.REGULACINDEVOLTAJEPanel, 'numeric');
            app.EditField_45.Editable = 'off';
            app.EditField_45.HorizontalAlignment = 'center';
            app.EditField_45.FontName = 'Consolas';
            app.EditField_45.FontSize = 14;
            app.EditField_45.Position = [146 45 59 22];
            % Create ALabel_10
            app.ALabel_10 = uilabel(app.REGULACINDEVOLTAJEPanel);
            app.ALabel_10.HorizontalAlignment = 'center';
            app.ALabel_10.FontWeight = 'bold';
            app.ALabel_10.Position = [204 83 25 15];
            app.ALabel_10.Text = '° A';
            % Create RegulacindeVoltajeLabel
            app.RegulacindeVoltajeLabel =
uilabel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.RegulacindeVoltajeLabel.HorizontalAlignment = 'center';
            app.RegulacindeVoltajeLabel.VerticalAlignment = 'center';
            app.RegulacindeVoltajeLabel.FontName = 'Comfortaa';
            app.RegulacindeVoltajeLabel.FontWeight = 'bold';
            app.RegulacindeVoltajeLabel.Position = [462 425 161 15];
            app.RegulacindeVoltajeLabel.Text = 'Regulación de Voltaje (%)';
            % Create RegulacindeVoltajeGauge
            app.RegulacindeVoltajeGauge =
uigauge(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure, 'semicircular');
            app.RegulacindeVoltajeGauge.Limits = [0 10];
            app.RegulacindeVoltajeGauge.MajorTicks = [0 1 2 3 4 5 6 7 8 9 10];
            app.RegulacindeVoltajeGauge.FontName = 'Comfortaa';
            app.RegulacindeVoltajeGauge.FontWeight = 'bold';
            app.RegulacindeVoltajeGauge.Position = [411 444 261 141];
            % Create EficienciaLabel
            app.EficienciaLabel = uilabel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.EficienciaLabel.HorizontalAlignment = 'center';
            app.EficienciaLabel.VerticalAlignment = 'center';
            app.EficienciaLabel.FontName = 'Comfortaa';
            app.EficienciaLabel.FontWeight = 'bold';
            app.EficienciaLabel.Position = [495 250 87 15];
            app.EficienciaLabel.Text = 'Eficiencia (%)';
            % Create EficienciaGauge
            app.EficienciaGauge = uigauge(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure,
'semicircular');
            app.EficienciaGauge.Limits = [50 100];
            app.EficienciaGauge.MajorTicks = [50 55 60 65 70 75 80 85 90 95 100];
            app.EficienciaGauge.FontName = 'Comfortaa';
            app.EficienciaGauge.FontWeight = 'bold';
            app.EficienciaGauge.Position = [408 269 261 141];
            % Create Label_48
            app.Label_48 = uilabel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.Label_48.BackgroundColor = [0.502 0.502 0.502];
            app.Label_48.HorizontalAlignment = 'center';
            app.Label_48.VerticalAlignment = 'center';
            app.Label_48.FontName = 'Comfortaa';
```

```matlab
            app.Label_48.FontSize = 18;
            app.Label_48.FontWeight = 'bold';
            app.Label_48.FontColor = [1 1 1];
            app.Label_48.Position = [1 30 1229 10];
            app.Label_48.Text = '';
            % Create Label_49
            app.Label_49 = uilabel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.Label_49.BackgroundColor = [0.6392 0.0784 0.1804];
            app.Label_49.HorizontalAlignment = 'center';
            app.Label_49.VerticalAlignment = 'center';
            app.Label_49.FontName = 'Comfortaa';
            app.Label_49.FontSize = 8;
            app.Label_49.FontWeight = 'bold';
            app.Label_49.FontColor = [1 1 1];
            app.Label_49.Position = [1 622 1229 10];
            app.Label_49.Text = '';
            % Create Label_50
            app.Label_50 = uilabel(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure);
            app.Label_50.BackgroundColor = [0.149 0.149 0.149];
            app.Label_50.HorizontalAlignment = 'center';
            app.Label_50.VerticalAlignment = 'center';
            app.Label_50.FontName = 'Comfortaa';
            app.Label_50.FontSize = 8;
            app.Label_50.FontWeight = 'bold';
            app.Label_50.FontColor = [1 1 1];
            app.Label_50.Position = [1 21 1229 10];
            app.Label_50.Text = '';
        end
    end
    methods (Access = public)
        % Construct app
        function app = Transformadores
            % Create and configure components
            createComponents(app)
            % Register the app with App Designer
            registerApp(app, app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure)
            if nargout == 0
                clear app
            end
        end
        % Code that executes before app deletion
        function delete(app)
            % Delete UIFigure when app is deleted
            delete(app.ProgramacinAvanzadaDiegoVillegasGoveaUIFigure)
        end
    end
end
```