lt1N-unit-frame-4
Version: 23 Oct 18b
Started: 21 Oct 18

Fourth step... In this step and the next, we will start to create and use a subroutine.
(It will use a local variable... unnecessarily!... but to show how local variables are created.))

The subroutine will eventually accomplish the totally useless task of doubling the number in iCountOfClicks. The result will be displayed on Label2.

1) Put Label2 on the form, using the IDE in the usual way. {{1}}
2) Enter, by hand, a forward declaration of the subroutine you are creating. {{2}}
   (Do not try to compile the app until the next step has also neen completed.)
3) Write the implementation of the forward declaration... initially we will only do something simple, NOT YET doubling iCountOfClicks. {{3}}
4) Write the code to use the subroutine. {{4}}

At this point, try running the app. It should “run”, but you should get just “xx” on Label2.

We'll fix that in The Fifth Step, so that we get two times the click count on the label, instead of the boring “xx”.

```
=================
unit Unit1;
{$mode objfpc}{$H+}

//------------------------
interface
uses Classes, SysUtils, FileUtil, Forms,
          Controls, Graphics, Dialogs, StdCtrls;

type
  TForm1 = class(TForm)
    Button1: TButton;
    Label2: TLabel;  {{1}}
    Label1: TLabel;
    procedure Button1Click(Sender: TObject);
    procedure FormCreate(Sender: TObject);
  private
    { private declarations }
       //variables first  {{2a}}
       iCountOfClicks:integer;
      //Note: all subroutines to go AFTER variables {{2b}}
      //Subtoutines: Functions and procedures. Can be jumbled.
      function sDoubleIt:string;   {{2c}}
  public
    { public declarations }
  end;
```

//... continues next page....

```
var
 Form1: TForm1;

implementation

{$R *.lfm}


procedure TForm1.Button1Click(Sender: TObject);
begin
  //”By hand” bit begins here
  iCountOfClicks:=iCountOfClicks+1;
  Label1.caption:=inttostr(iCountOfClicks);
  Label2.caption:=sDoubleIt;   {{4}}
  if Button1.caption<>'Yes' then begin
    Button1.caption:='Yes';
    end//no ; here
  else begin
    Button1.caption:='No';
  end;  //Last of “by hand” bit.
end;

procedure TForm1.FormCreate(Sender: TObject);
begin
    iCountOfClicks:=0;
end;

function TForm1.sDoubleIt:string;   {{3 begins (Note the “TForm1” part.))}}
//This is “bad” in several ways! But will do to illustrate SOME things...
begin
  result:='xx';
end;  {{end of 3. Last of several lines to achieve crude funtion.}}

end.
```