

How to swap two integers without using a temporary variable

You can exchange two integers without using a third temporary variable as follows, assuming *A* and *B* are integers with values assigned:

```
A := A + B;  
B := A - B;  
A := A - B;
```

To demonstrate this, drop two *TEdit* controls and one *TButton* on a form in a new Delphi VCL forms project and create an *OnClick* event handler for the button as follows:

```
procedure TForm1.Button1Click(Sender: TObject);  
var  
  A, B: Integer;  
begin  
  A := StrToInt(Edit1.Text);  
  B := StrToInt(Edit2.Text);  
  A := A + B;  
  B := A - B;  
  A := A - B;  
  Edit1.Text := IntToStr(A);  
  Edit2.Text := IntToStr(B);  
end;
```

Now enter a numbers in both edit controls. Clicking the button should swap the numbers in the controls.

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