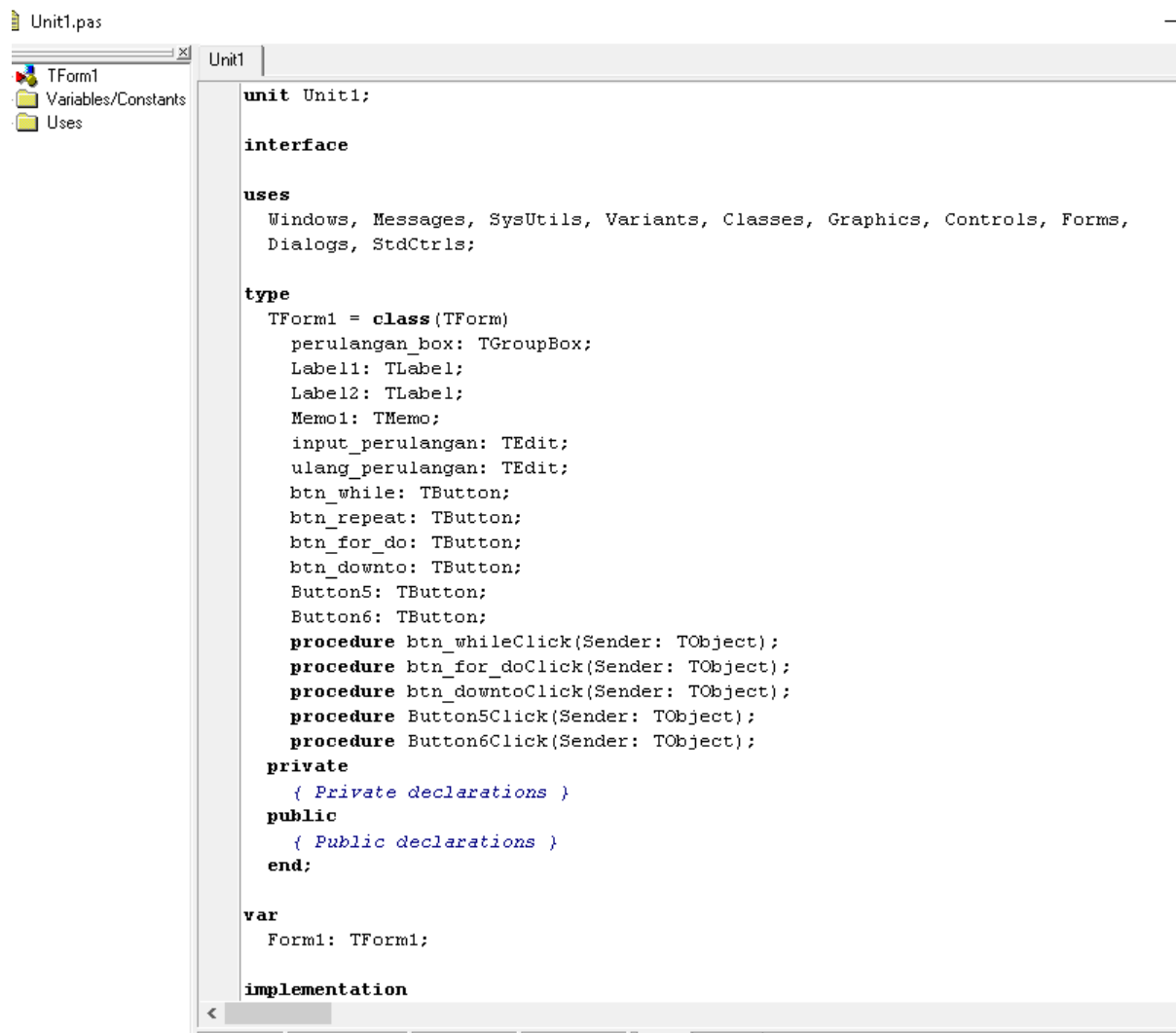
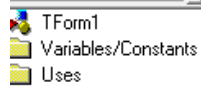


Program:





Unit1

**implementation**

{\$R \*.dfm}

**procedure** TForm1.btn\_whileClick(Sender: TObject);**var**E, F :  
Integer;**begin**

memo1.Clear;

E:= StrToInt

(input\_perulangan.Text); F:=1;

**while** F <>StrToInt(ulang\_perulangan.Text) **do****begin**

memo1.Lines.Add('Perulangan ke- '+IntToStr(F)+' = '+IntToStr(E));

E:= E+1;

F:= F+1;

**end;****end;****procedure** TForm1.btn\_for\_doClick(Sender: TObject);**var** E, F :

Integer;

**begin**

memo1.Clear;

E:= StrToInt (input\_perulangan.Text);

**for** F:= 1 **to** StrToInt(ulang\_perulangan.Text) **do****begin**

memo1.Lines.Add('Perulangan ke-' +IntToStr(F)+' = '+IntToStr(E));

E:= E+1;

**end;****end;****procedure** TForm1.btn\_downtoClick(Sender: TObject);**var** E,F: Integer;

&lt;

50: 38

Modified

Insert

\Code\Diagram\

```

Unit1.pas
Unit1
TForm1
Variables/Constants
Uses

memo1.Lines.Add('Perulangan ke-'+IntToStr(F)+' = '+IntToStr(E));
E:= E+1;
end;
end;

procedure TForm1.btn_downtoClick(Sender: TObject);
var E,F: Integer;
begin
memo1.Clear;
E:= StrToInt (input_perulangan.Text);
F:= 1;
for E:= E downto (StrToInt(input_perulangan.Text)-
StrToInt(ulang_perulangan.Text)+1) do
begin
memo1.Lines.Add('Perulangan ke-'+IntToStr(F)+' = '+IntToStr(E));
F:= F+1;
end;
end;

procedure TForm1.Button5Click(Sender: TObject);
begin
memo1.Clear;
input_perulangan.Text := '';
ulang_perulangan.Text := '';
end;

procedure TForm1.Button6Click(Sender: TObject);
begin
begin
close;
end;
end;

end.

```

Form1

Perulangan

Angka Awal

Angka Akhir

Memo1

While - Do

Repeat\_Until

For - Do

For\_DownTo

Reset

Exit

## Output Program:

Form1

Perulangan

Angka Awal: 1

Angka Akhir: 10

Perulangan ke- 1 = 1  
Perulangan ke- 2 = 2  
Perulangan ke- 3 = 3  
Perulangan ke- 4 = 4  
Perulangan ke- 5 = 5  
Perulangan ke- 6 = 6  
Perulangan ke- 7 = 7  
Perulangan ke- 8 = 8  
Perulangan ke- 9 = 9

While - Do

Repeat\_Until

For - Do

For\_DownTo

Reset

Exit

Form1

Perulangan

Angka Awal: 1

Angka Akhir: 10

Perulangan ke-1 = 1  
Perulangan ke-2 = 2  
Perulangan ke-3 = 3  
Perulangan ke-4 = 4  
Perulangan ke-5 = 5  
Perulangan ke-6 = 6  
Perulangan ke-7 = 7  
Perulangan ke-8 = 8  
Perulangan ke-9 = 9  
Perulangan ke-10 = 10

While - Do

Repeat\_Until

For - Do

For\_DownTo

Reset

Exit

Form1

Perulangan

Angka Awal

Angka Akhir

Perulangan ke-1 = 1  
Perulangan ke-2 = 0  
Perulangan ke-3 = -1  
Perulangan ke-4 = -2  
Perulangan ke-5 = -3  
Perulangan ke-6 = -4  
Perulangan ke-7 = -5  
Perulangan ke-8 = -6  
Perulangan ke-9 = -7  
Perulangan ke-10 = -8

While - Do

Repeat\_Until

For - Do

For\_DownTo

Reset

Exit

Form1

Perulangan

Angka Awal

Angka Akhir

While - Do

Repeat\_Until

For - Do

For\_DownTo

Reset

Exit

```
unit Unit1;
```

```
interface
```

```
uses
```

```
Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,  
Dialogs, StdCtrls;
```

```
type
```

```
TForm1 = class(TForm)
```

```
    perulangan_box: TGroupBox;
```

```
    Label1: TLabel;
```

```
    Label2: TLabel;
```

```
    Memo1: TMemo;
```

```
    input_perulangan: TEdit;
```

```
    ulang_perulangan: TEdit;
```

```
    btn_while: TButton;
```

```
    btn_repeat: TButton;
```

```
    btn_for_do: TButton;
```

```
    btn_downto: TButton;
```

```
    Button5: TButton;
```

```
    Button6: TButton;
```

```
    procedure btn_whileClick(Sender: TObject);
```

```
    procedure btn_for_doClick(Sender: TObject);
```

```
    procedure btn_downtoClick(Sender: TObject);
```

```
    procedure Button5Click(Sender: TObject);
```

```
    procedure Button6Click(Sender: TObject);
```

```
private
```

```
    { Private declarations }
```

```
public
```

```
    { Public declarations }
```

end;

var

Form1: TForm1;

implementation

{ \$R \*.dfm }

procedure TForm1.btn\_whileClick(Sender: TObject);

var

E, F :

Integer;

begin

memo1.Clear;

E:= StrToInt

(input\_perulangan.Text); F:=1;

while F <>

StrToInt(ulang\_perulangan.Text) do

begin

memo1.Lines.Add('Perulangan ke- '+IntToStr(F)+' = '+IntToStr(E));

E:= E+1;

F:= F+1;

end;

end;

procedure TForm1.btn\_for\_doClick(Sender: TObject);

var E, F :

Integer;

begin

```

memo1.Clear;

E:= StrToInt (input_perulangan.Text);
for F:= 1 to StrToInt(ulang_perulangan.Text) do
begin
    memo1.Lines.Add('Perulangan ke-'+IntToStr(F)+' = '+IntToStr(E));
    E:= E+1;
end;
end;

```

```

procedure TForm1.btn_downtoClick(Sender: TObject);
var E,F: Integer;
begin
    memo1.Clear;
    E:= StrToInt (input_perulangan.Text);
    F:= 1;
    for E:= E downto (StrToInt(input_perulangan.Text)-
        StrToInt(ulang_perulangan.Text)+1) do
    begin
        memo1.Lines.Add('Perulangan ke-'+IntToStr(F)+' = '+IntToStr(E));
        F:= F+1;
    end;
end;

```

```

procedure TForm1.Button5Click(Sender: TObject);
begin
    memo1.Clear;
    input_perulangan.Text := "";
    ulang_perulangan.Text := "";
end;

```



```
procedure TForm1.Button6Click(Sender: TObject);  
begin  
begin  
close;  
end;  
end;  
  
end.
```