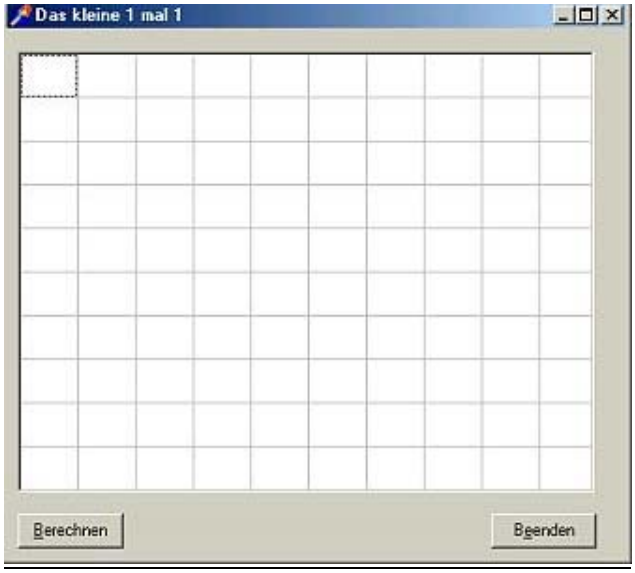
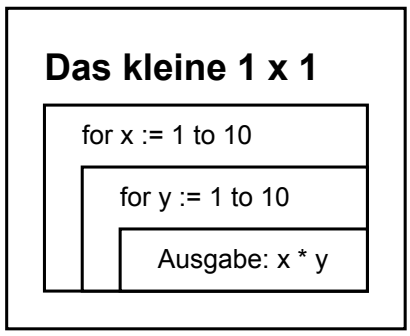
Aufgaben zu Geschachtelten Schleifen

Das kleine 1 x 1

Oberfläche



Struktogramm



Quelltext

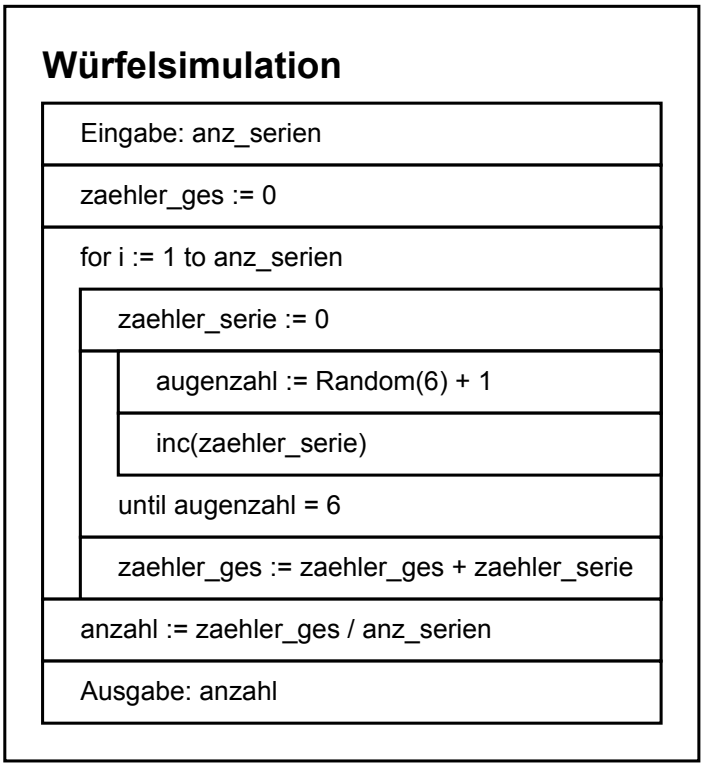
```
procedure TForm1.Button1Click(Sender: TObject);
var
  x, y: integer;
begin
  for x := 1 to 10 do
    for y := 1 to 10 do
      StringGrid1.Cells[x-1,y-1] := IntToStr(x*y);
end;
```

Würfelsimulation

Oberfläche



Struktogramm



Quelltext

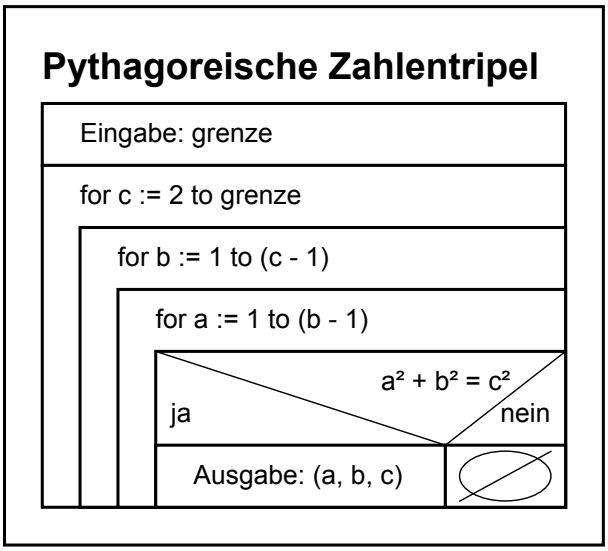
```
procedure TForm1.BitBtn1Click(Sender: TObject);
var
  anz_serien, zaehler_ges, zaehler_serie, i, augenzahl: integer;
  anzahl: double;
begin
  Randomize;
  anz_serien := StrToInt(Edit1.Text);
  zaehler_ges := 0;
  for i := 1 to anz_serien do
  begin
    zaehler_serie := 0;
    repeat
      augenzahl := Random(6) + 1;
      inc(zaehler_serie);
    until augenzahl = 6;
    zaehler_ges := zaehler_ges + zaehler_serie;
  end;
  anzahl := zaehler_ges / anz_serien;
  Edit2.Text := FloatToStrF(anzahl,ffFixed,6,2);
end;
```

Pythagoreische Zahlentripel

Oberfläche



Struktogramm



Quelltext:

```
procedure TForm1.Button1Click(Sender: TObject);
var
  a, b, c, grenze: integer;
begin
  grenze := StrToInt(Edit1.Text);
  for c := 2 to grenze do
    for b := 1 to (c-1) do
      for a := 1 to (b-1) do
        if Power(a,2) + Power(b,2) = Power(c,2) then
          Memo1.Lines.Add('(' + IntToStr(a)  + ', '+
          IntToStr(b) + ', '+ IntToStr(c) + ')');
end;
```