In[714]:=
```
SetDirectory[NotebookDirectory[]];

layers = 6; (*Number of nested layers of the pyramid*)
gradient = "SolarColors"; (*Color scheme used*)

output = {};
eqTriangle[length_, Δx_, Δy_, Δz_] :=
  Graphics[{Opacity[0], EdgeForm[Thick], Polygon[{{(-length / 2) + Δx, Δy, Δz},
      {Δx, (length * Sqrt[3] / 2) + Δy, Δz}, {(length / 2) + Δx, Δy, Δz}}]}];
radius[length_] := length / Sqrt[3];
triangleUp[length_, Δx_, Δy_, numLayers_] :=
  Graphics[{Opacity[(layers - numLayers) / 10], EdgeForm[Thickness[Small]],
    ColorData[gradient][numLayers], Polygon[{{(radius[length]) * Cos[7 π / 6] + Δx,
       (radius[length]) * Sin[7 π / 6] + Δy}, {Δx, (radius[length]) + Δy},
      {(radius[length]) * Cos[11 π / 6] + Δx, (radius[length]) * Sin[11 π / 6] + Δy}}]}];
triangleDown[length_, Δx_, Δy_, numLayers_] := Graphics[
   {Opacity[(layers - numLayers) / 10], EdgeForm[Thickness[Small]],
    ColorData[gradient][numLayers], Polygon[{{(radius[length]) * Cos[7 π / 6] + Δx,
       -(radius[length]) * Sin[7 π / 6] + Δy}, {Δx, -(radius[length]) + Δy},
      {(radius[length]) * Cos[11 π / 6] + Δx, -(radius[length]) * Sin[11 π / 6] + Δy}}]}];
sierpTriangle[length_, Δx_, Δy_, numLayers_] := If[numLayers == layers,
   AppendTo[output, triangleUp[length, Δx, Δy, numLayers]];
   sierpTriangle[length / 2, Δx, Δy, numLayers - 1],
   AppendTo[output, triangleDown[length, Δx, Δy, numLayers]]; If[numLayers == 0,
    "Base reached", sierpTriangle[length / 2, (radius[length]) * Cos[7 π / 6] + Δx,
     (radius[length]) * Sin[7 π / 6] + Δy, numLayers - 1];
    sierpTriangle[length / 2, Δx, (radius[length]) + Δy, numLayers - 1];
    sierpTriangle[length / 2, (radius[length]) * Cos[11 π / 6] + Δx,
     (radius[length]) * Sin[11 π / 6] + Δy, numLayers - 1]]];

sierpTriangle[16, 0, 0, layers];
Show[output]
Export["Sierpinski.Triangle.pdf", EvaluationNotebook[]];
```

Out[722]=