

## // MinTuts/Procedural Terrain.shader

```
Shader "MinTuts/Procedural Terrain" {
  SubShader {
    Pass {
      CGPROGRAM

      #pragma vertex   vert
      #pragma fragment frag

      #include "UnityCG.cginc"

      struct v2f {
        float4 pos   : SV_POSITION;
        float3 wpos  : POSITION1;
      };

      v2f vert(float4 vertex : POSITION) {
        v2f o;

        o.pos   = UnityObjectToClipPos(vertex);
        o.wpos  = mul(unity_ObjectToWorld, vertex);

        return o;
      }

      float4 frag(v2f i) : COLOR {
        float  p = i.wpos.y * 0.015;
        float3 y = float3(p, p, p);

        return float4(y, 1);
      }
    }
  }
}
```

**CGPROGRAM/ENDCG** specify *where* the **Cg** code **Unity** needs to compile is

Everything between **CGPROGRAM/ENDCG** is **NVIDIA's Cg** (aka *C for graphics*)

You can mix **HLSL** (*High-Level Shader Language* or *High-Level Shading Language*; aka **Microsoft's DirectX**) and **Cg**

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            float4 frag(v2f i) : COLOR {
                float p = i.wpos.y * 0.015;
                float3 y = float3(p, p, p);

                return float4(y, 1);
            }

            ENDCG
        }
    }
}
```

These are compilation directives

“**#pragma** gives the compiler special instructions for the compilation of the file in which it appears. The instructions must be supported by the compiler.”  
—Microsoft docs