// 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);
    ENDCG
```

We assign the result of this calculation to the variable **p**...

which has a type of float

We then <u>use</u> **p** to <u>build</u>... a **float3** <u>representing</u> the <u>red</u>, <u>green</u>, and <u>blue</u> color <u>channels</u>

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We assign the result of this calculation to the variable \mathbf{p} ...

which has a type of **float**

We then <u>use</u> **p** to <u>build</u>... a **float3** <u>representing</u> the <u>red</u>, <u>green</u>, and <u>blue</u> color channels

We then assign this **float3** to the variable **y**; making it clear that our **float3** color comes from our **i.wpos.y** value