1. Get texture dimensions and calculate uv offset
   1. Uv offset is number of points you wish to move in texture space divided by the texture dimensions.
   2. Calculate the world offset which is the uv offset increased scale of its current state of zero to one to the larger scale of the texture.
2. Get the heights of the four cardinal directions
   1. For each of the cardinal directions calculate their current height
      1. To calculate the height, sample the height map texture x (or whatever rgb value that is used to denote height in the image you are sampling) value at the uv plus or minus the offset depending in which direction we wish to calculate.
      2. Multiply the height by a value from the main application
3. Calculate the tangents of the four cardinal directions
   1. Normalise a new float3 value setting either the y or z value to the negative or positive world offset depending on the direction of the tangent we are calculating. Then set the y value to that of the current direction’s height subtracted by the current height of the position we are wanting to calculate the normal of.
4. Cross multiply the tangents for the resultant normal.
   1. Add together the cross multiplied normals of the Intercardinal directions and then divide by four (Number of items) to get the average which will be our new normal