```
procedure RGBtoHSI (in R, G, B; out H, S, I){

        I = max (R, G, B);
        min = min (R, G, B);
        If (I ≥ 0.0) then S = (I-min)/I; Else S = 0.0;
        If (S ≤ 0.0) then H = -1.0; return;
        //compute the hue based on the relative sizes of
        // the RGB components
        Diff = I - min;
        //is the point within +/- 60 degrees of the red
        //axis?
        If (r = I) then H = (π/3) * (g-b)/diff;
        //is the point within +/- 60 degrees of the green
        //axis
        Else if (g = I) then H = (2 * π/3) + π/3 * (b-r)/diff;
        //is the point within +/- 60 degrees of the blue
        //axis?
        Else if (b = I) then H = (4 * π/3) + π/3 * (r-g)/diff;
        If (H ≤ 0.0) then H = H + 2π;


}
```