

Conversion of RGB encoding to HSI encoding.

RGB(175, 55, 190);

procedure RGBtoHSI (RGB(175, 55, 190), HSI(H, S, I)) {

$$I = \max(175, 55, 190); \therefore I = 190;$$

$$\min = \min(175, 55, 190); \therefore \min = 55;$$

$$I > 0.0; \text{ so, } S = (190 - 55) / 190 \\ = 0.715$$

$$\text{Diff} = 190 - 55 = 135;$$

$$(b=I) \text{ so, } H = (4 * \pi / 3) + \pi / 3 * (175 - 55) / 135;$$

$$// \pi = 180;$$

$$= 240 + 60 * 0.888;$$

$$= 293.333;$$

}

$$(H, S, I) = (293.333, 0.715, 190);$$