H is the Hue of the color to convert.
S is the Saturation of the color to convert.
L is the Luminosity of the color to convert.
M_{axH} is the possible maximum of H (generaly 360°).
M_{axS} is the possible maximum of S (generaly 100%).
M_{axL} is the possible maximum of L (generaly 100%).

H', S', L', C, X, m, R', G' and B' are internal variables that mustn't be displayed.

R is the part of Red in the translated color.
G is the part of Green in the translated color.
B is the part of Blue in the translated color.
M_{axR} is the possible maximum of R (generaly 255 or 100%).
M_{axG} is the possible maximum of G (generaly 255 or 100%).
M_{axB} is the possible maximum of B (generaly 255 or 100%).

$$H' = \frac{H}{M_{axH}} \times 360$$

$$S' = \frac{S}{M_{axS}}$$

$$L' = \frac{L}{M_{axL}}$$

$$C = (1 - |2 \times L' - 1|) \times S'$$

$$X = C \times (1 - |\frac{H}{60} \mod 2 - 1|)$$

$$m = L' - \frac{C}{2}$$

$$R', G', B' = \begin{cases} C, X, 0 & 0° \leq H < 60° \\ X, C, O & 60° \leq H < 120° \\ 0, C, X & 120° \leq H < 180° \\ 0, X, C & 180° \leq H < 240° \\ X, 0, C & 240° \leq H < 300° \\ C, 0, X & 300° \leq H < 360° \end{cases}$$

$$R = (R' + m) \times M_{axR}$$

$$G = (G' + m) \times M_{axG}$$

$$B = (B' + m) \times M_{axB}$$