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Subject: Re: Please check the list of 2019.1 changes  
Posted by [mirek](#) on Thu, 21 Feb 2019 08:52:02 GMT  
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Next iteration of DarkTheme function. I guess this is the final one...

```
Color DarkTheme2(Color color)
{
    if(IsNull(color))
        return Null;

    double v[3];
    v[0] = color.GetR();
    v[1] = color.GetG();
    v[2] = color.GetB();

    static double c[3] = { 0.21, 0.72, 0.07 };

    double m0 = 0.21 * v[0] + 0.72 * v[1] + 0.07 * v[2];
    double m = 256 - m0;

    int i0 = 0;
    int i1 = 1;
    int i2 = 2;

    if(v[i0] > v[i1])
        Swap(i0, i1);
    if(v[i1] > v[i2])
        Swap(i1, i2);
    if(v[i0] > v[i1])
        Swap(i0, i1);

    if(m0 < m) {
        m -= m0;
        double a = min(v[i2] + m, 255.0) - v[i2];
        v[i0] += a;
        v[i1] += a;
        v[i2] += a;
        m -= a;

        a = min(v[i1] + m / (c[i0] + c[i1]), 255.0) - v[i1];
        v[i0] += a;
        v[i1] += a;
        m -= (c[i0] + c[i1]) * a;
    }
}
```

```
v[i0] = min(v[i0] + m / c[i1], 255.0);
}
else {
m = m0 - m;
double a = v[i0] - max(v[i0] - m, 0.0);
v[i0] -= a;
v[i1] -= a;
v[i2] -= a;
m -= a;

a = v[i1] - max(v[i1] - m / (c[i1] + c[i2]), 0.0);
v[i1] -= a;
v[i2] -= a;
m -= (c[i1] + c[i2]) * a;

v[i2] = max(v[i2] - m / c[i2], 0.0);
}

return Color((int)v[0], (int)v[1], (int)v[2]);
}
```

## File Attachments

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1) [Clipboard01.png](#), downloaded 1330 times

