```
shader
circle(
    float s = 0
        [[
        int lockgeom = 0,
        string widget = "null",
        ]],
    float t = 0
        [[
        int lockgeom = 0,
        string widget = "null",
        ]],
    float radius = 0.4,
    float s_center = 0.5,
    float t_center = 0.5,
    color bak_color = 1,
    color pat_color = color(1,0,0),
    float s_repeats = 4,
    float t_repeats = 4,
    float even_row_offset = 0,
    output color resultRGB = 0)
{
// Ex: s is 0.7
//     ss will be 0.7 x 4 = 2.8
//     mod() returns the fractional part ie. 0.8
float ss = mod(s * s_repeats, 1);
float tt = mod(t * t_repeats, 1);
// the floor() function returns the whole number ie. 2
float row = floor(t * t_repeats);
// Move "even" rows over and then recalculate ss
if(mod(row, 2) == 0)
    ss = mod(s * s_repeats - even_row_offset, 1);

float a = ss - s_center;
float b = tt - t_center;
float dist = sqrt(a * a + b * b);
if(dist <= radius)
    resultRGB = pat_color;
else
    resultRGB = bak_color;
}
```