Midpoint Circle Drawing Algorithm

1. Input (x_c, y_c), radius (r).
2. p = 1 – r //initial parameter
3. xes = [], yes = []
4. Call function → symmetry plotter to append first point (0, r) to the list.
5. while x < y:

        x = x + 1

    if p<0:

        p = p + 2x + 1

    else:

        y = y – 1

        p = p + 2(x – y) + 1

6. Call symmetry plotter to append new (x, y)
7. Symmetry plotter function (xes, yes, x, y, x_c, y_c)

        xes.extend ([x , -x, -x, x, y, -y, y, -y])

        yes.extend ([y, y, -y, -y, x, x, -x, -x])