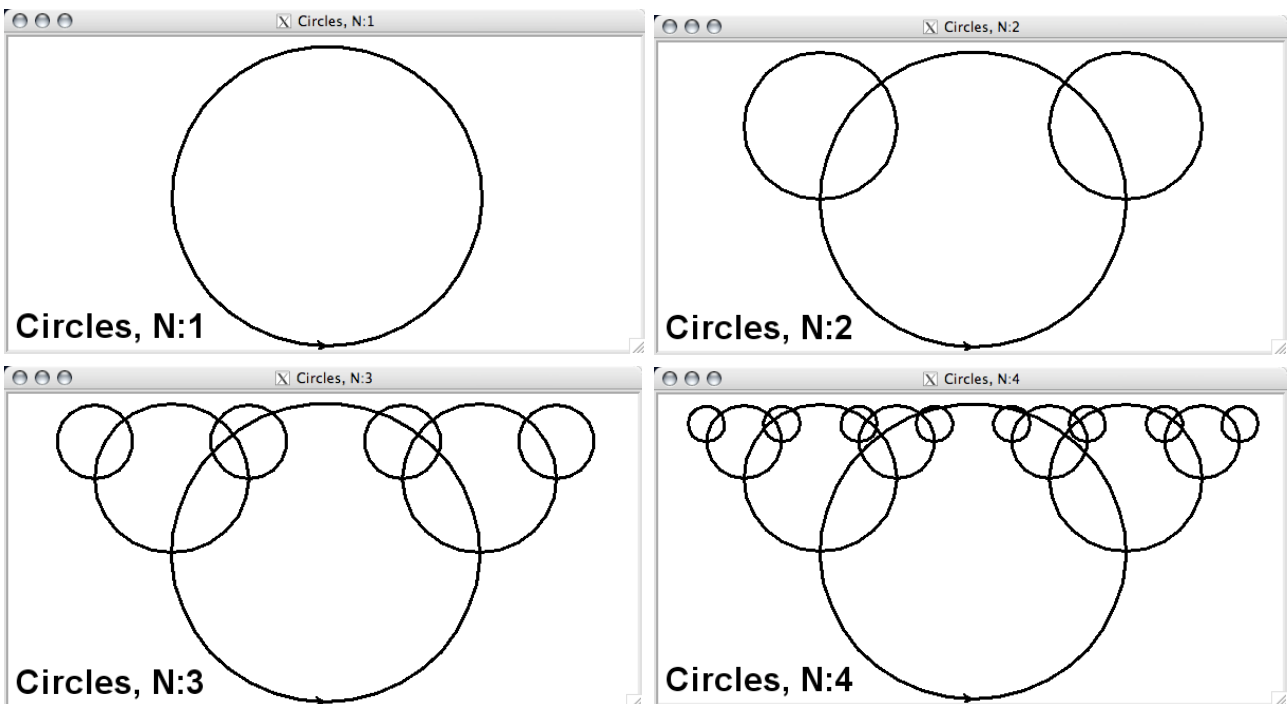


1. Problem Statement

Write a program that generates the circle patterns below. The program will prompt for one input parameter, N , which controls the depth of recursion.

- If $N < 1$, draw nothing.
- If $N = 1$, draw a single full sized circle.
- If $N = 2$, draw the same circle as for $N = 1$. In addition draw two half sized circles at the left and rightmost points of the full sized circle.
- If $N = 3$, draw the same circles as for $N = 2$. In addition draw four quarter sized circles at the left and rightmost points of the half sized circles.



The file you submit should be your Python solution program, `circles.py`.

You will not receive full credit if you do not use recursion to draw the pattern.

It is not required to title your window or draw text on the screen. If you wish to, please reference the functions `title()` and `write()` in the turtle documentation:

<http://docs.python.org/py3k/library/turtle.html>

Submit your code file to your section's MyCourses drop box for this week's homework.