

## Python Challenges

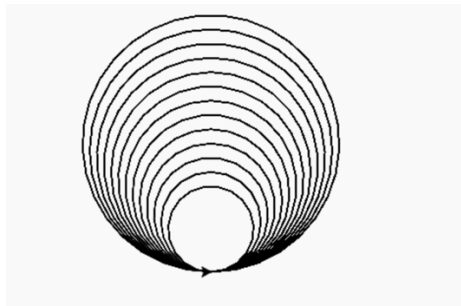
### Random Lines

Try filling the screen with random lines – you can try making the colour, direction, starting point and thickness random. Can you make anything that you like?

Can you do the same thing with curved lines?

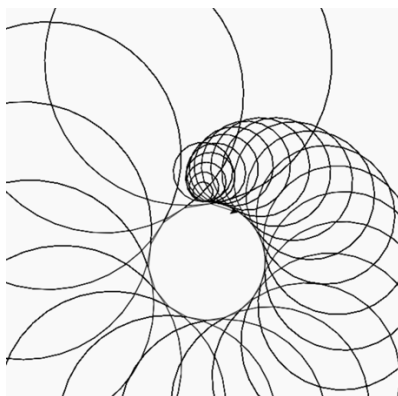
### More Turtle Patterns

Can you make this pattern?



Try playing with the pen colours, background colour and pen size to make it look prettier! You could try gradually changing the colour or using random colours.

Can you change your code so it spirals out like this?



Try experimenting with the angles, sizes and colours again.

## More activities

Have a look at the Python Turtle documentation at <https://docs.python.org/3.3/library/turtle.html> and see if there is anything there that you fancy using or trying!

More spiral activities:

<http://openbookproject.net/thinkcs/python/english3e/functions.html>

Recursion and fractals:

<http://openbookproject.net/thinkcs/python/english3e/recursion.html>

Moroccan Mosaic: <https://www.101computing.net/moroccan-mosaic/>

Python Fractals: <https://www.101computing.net/python-fractals/>

Python spirograph: <https://www.101computing.net/python-turtle-spirograph/>