Archimedean Sprial

Starting with the code provided in `arch_spiral.py`, add turtle commands into the `main` function in the program to draw the Archimedian spiral shown below. In Cartesian coordinates, the spiral's path is given by

$$x = \frac{\theta}{10}\cos(\theta)$$

and

$$y = \frac{\theta}{10}\sin(\theta)$$

where θ increases from $0°$. Note that in these equations, θ is in degrees, but that the `sin` and `cos` functions in Python expect their argument to be in radians. You can convert from degrees to radians using

$$\theta_{\text{radians}} = \theta_{\text{degrees}} * \frac{\pi}{180}.$$

Save your program as `arch_spiral.py` and submit it along with a screenshot showing your drawing.

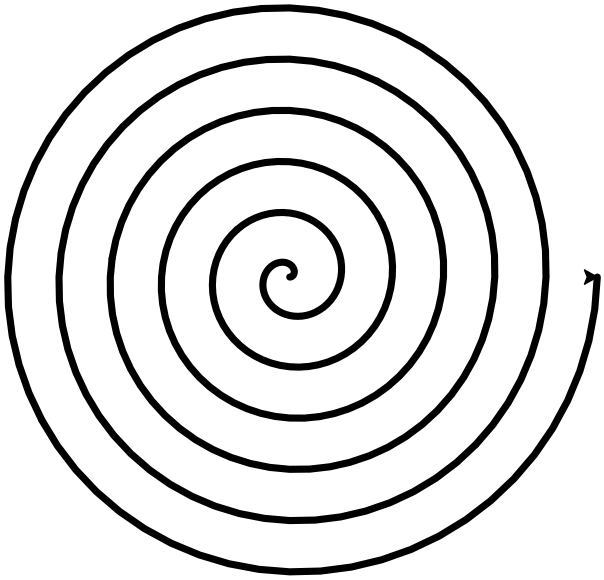

Figure 1: Archimedean spiral pattern for Exercise 25.