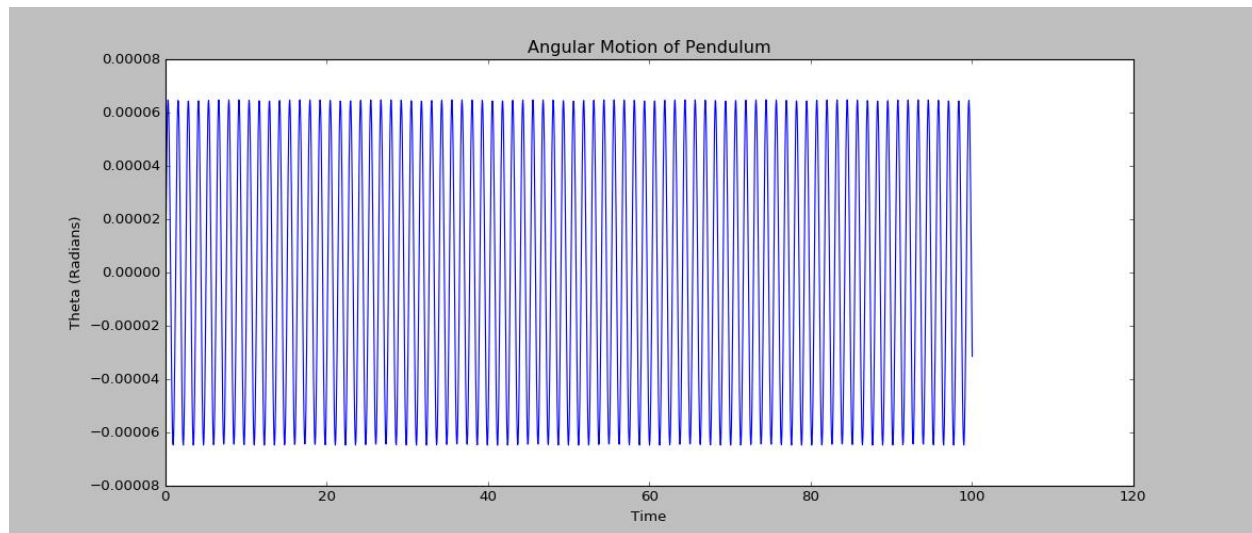Problem 4:

This is what the pendulum's motion ended up looking like after using RK4.

I tested for other values in the code and got similar looking graphs.