Write a program using Euler's method to simulate the motion of a cubic oscillator $F = -kx^3$. Assume that the initial velocity is zero and that the initial displacement is $x_0 = A$, and that $k/m = 3$.
(a) Find the period of oscillation in the case that $A = 1$.
(b) Find the period of oscillation in the case that $A = 2$.
Be sure the tell me how you used your code to answer the questions.