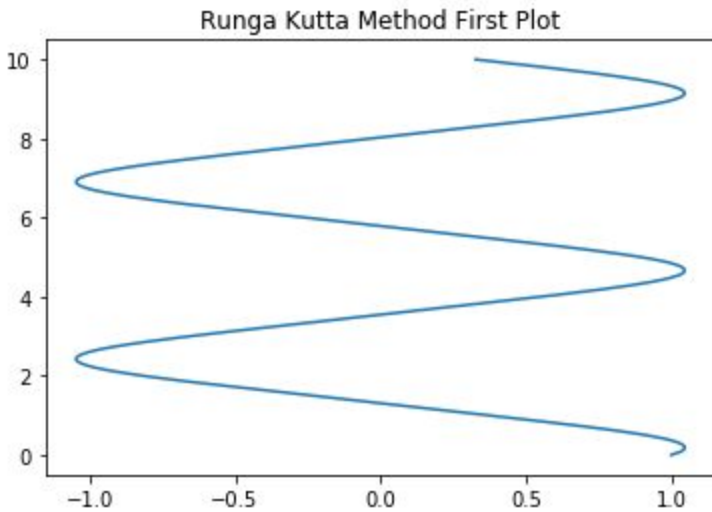
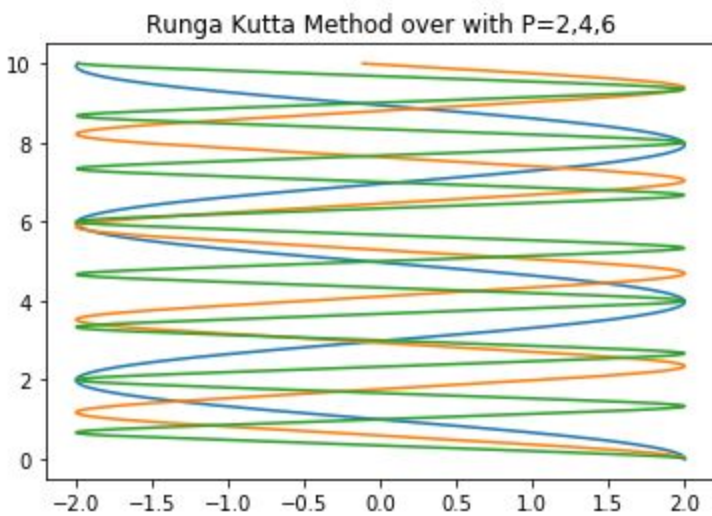
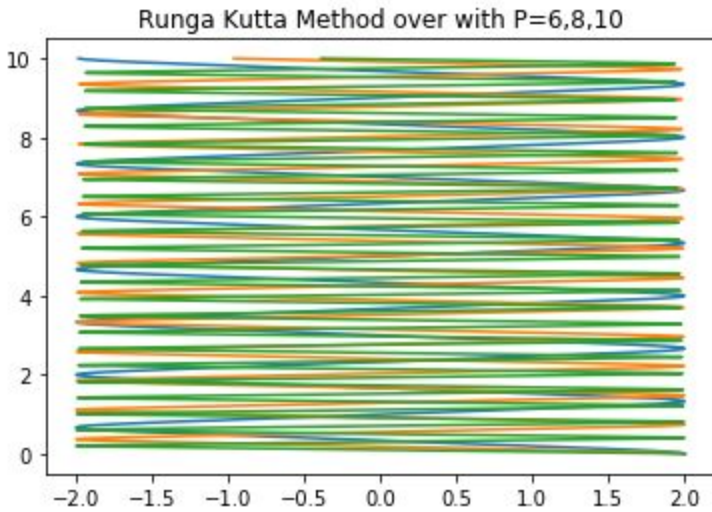


Jessica Hamilton  
Computational  
Exercise 20  
Anharmonic Oscillator with RK method

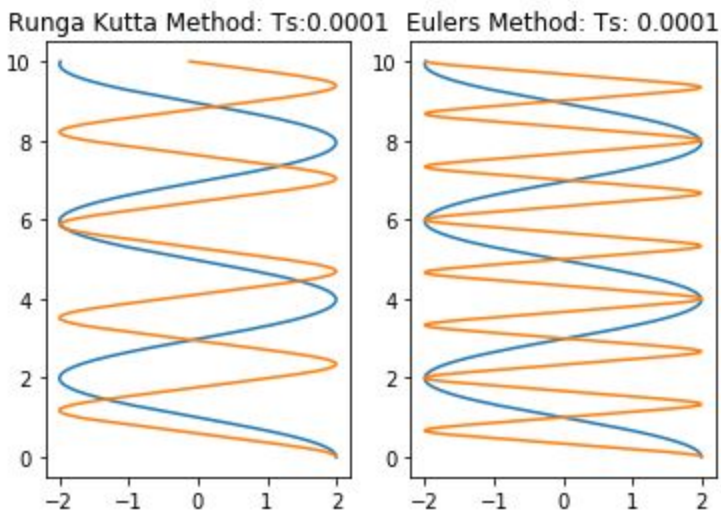


Above is the initial graph of the Runge Kutta method and below is the graphs representing the various P values with the Runge Kutta Method.

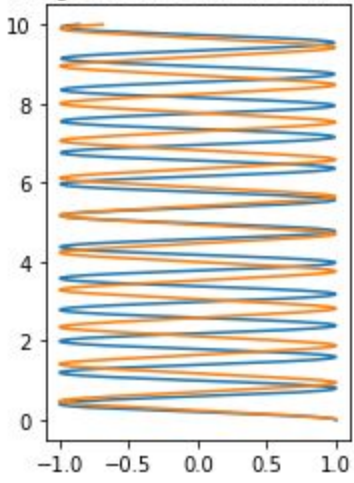




When comparing the two methods, They are quite similar, with a given amplitude, but the frequency or period is different for the two. At a small step-size, the Euler method has a higher frequency, but as the step-size grows, the Runga Kutta method increases in frequency. You can see this below.



Runga Kutta Method: Ts:0.0005



Eulers Method: Ts:0.0005

