

Spring-Mass System - Exercises

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Exercise

Modify the code from the tutorial to make a plot showing the effect of the no. of time-steps n on the Euler's method solution. Use the following two values for n : 100 and 200. Make two calls to the *Euler* function for the two different time-steps.

Your modified plot of x vs. t should contain three curves:

1. $n=100$ solution
2. $n=200$ solution
3. Analytical solution

Use a different line style and color for each curve. Modify the legend to suitably label the three curves. Change the axis limits as necessary. We suggest that you create a copy of the code from the tutorial and work with that.

Submit your modified code and plot.

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