MATLAB HOMEWORK

made by Seungchul Lee

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| P1 | We want to explore a cycloid (refer to <http://en.wikipedia.org/wiki/Cycloid> for more information). A cycloid is the curve traced by a point on the rim of a circular wheel as the wheel rolls along a straight line.  C:\Users\Seungchul\Pictures\Photo Stream\My Photo Stream\IMG_1771.JPG  1) Create a m-code to plot the cycloid trajectory. Remember there are many ways to do it.    2) Create a m-code to animate a cycloid by a rolling unit circle. |
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| P2 | Let’s try more complicated one, hypotrochoid (<http://en.wikipedia.org/wiki/Hypotrochoid>).  C:\Users\Seungchul\Pictures\Photo Stream\My Photo Stream\IMG_1770.JPG  1) Write a m-code to plot the cycloid trajectory with *r* =0.1, 0.2, 0.3, …,0.9    2) Animate the hypotrochoid with two circles (unit circle and circle with radius *r* ) |
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