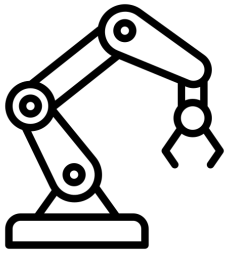


# Lab Instruction

## ROB 701 Introduction to Robotics



### Assignment 1:

Follow the instruction and *complete the coding*.

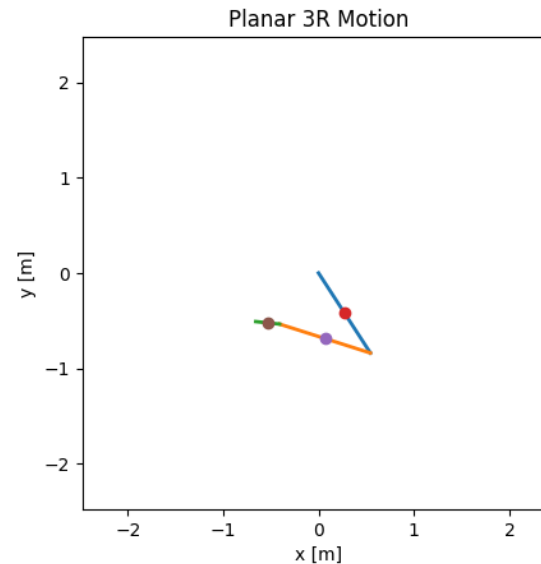
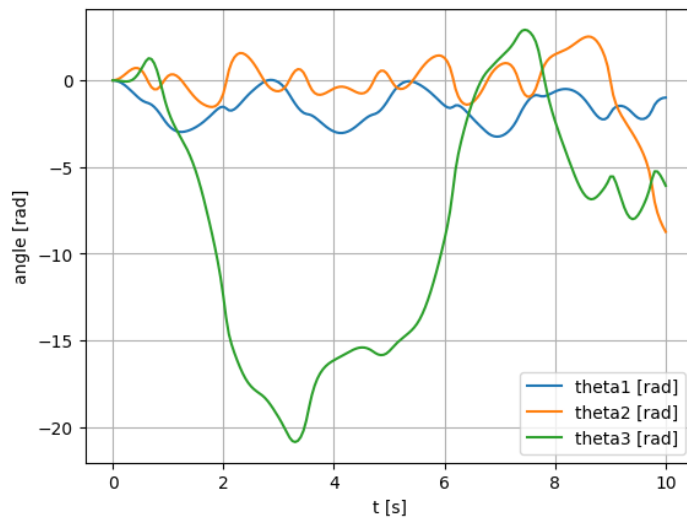
[https://github.com/RealGaule/ROB701\\_Lab/blob/master/Lab\\_1016.ipynb](https://github.com/RealGaule/ROB701_Lab/blob/master/Lab_1016.ipynb)

You are expected to get the following results in the evaluation section:

Left: angle-time figure plot

Middle: robot animation

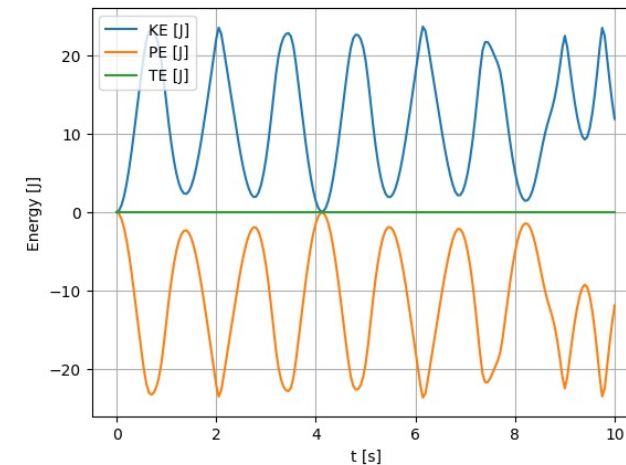
Right: Energy conservatism verification.



### Assignment 2:

Write a report to:

- (1) Summarize the **concise formular expression** for Lagrange dynamics your implemented in Assignment 1.
- (2) Investigate alternative dynamics modeling methods (e.g., the Recursive Newton–Euler Algorithm) and discuss their advantages and limitations.



### Deliverables:

- ☐ Jupyter Notebook
- ☐ Written Report

