

# Simulation results

The nodes are fixed, and position of nodes,  $k_1, k_3, d_1, d_3$  are randomly chosen.

The range for nodes position =  $[0, 10]$

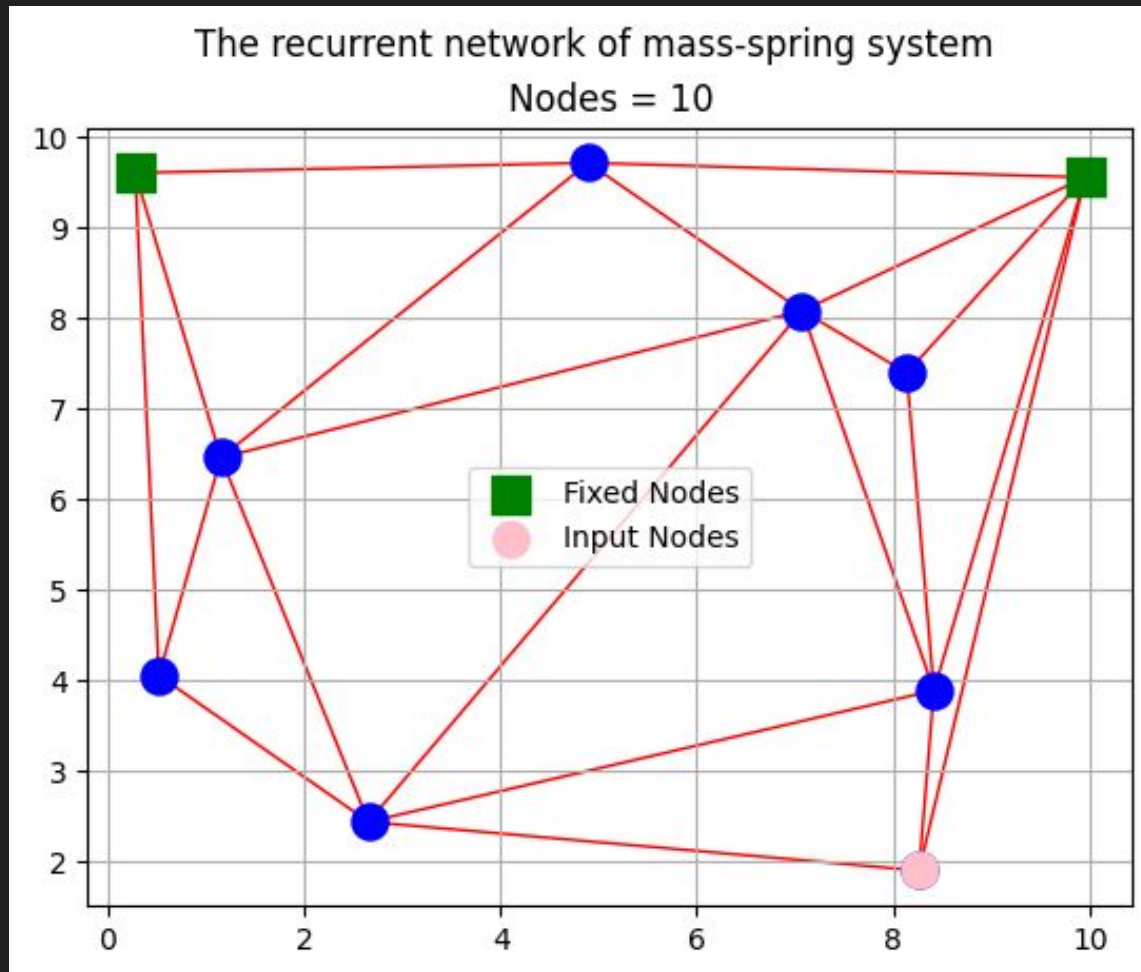
The range for  $k_1, d_1 = [1, 100]$

The range for  $k_3, d_3 = [1, 10]$

The weights were also randomly chosen between  $[-1, 1]$

# Simulation 1

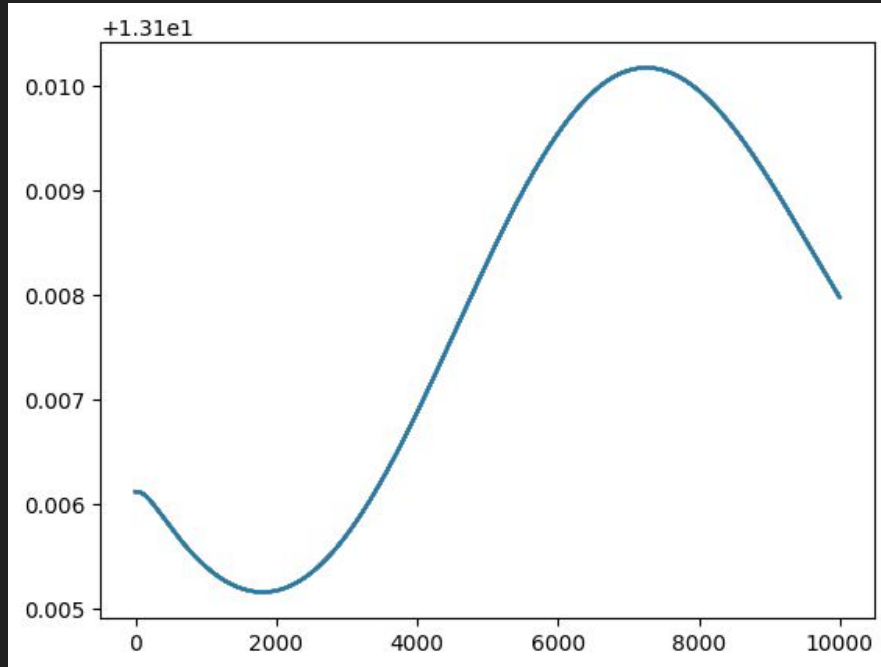
Nodes = 10  
Network ->



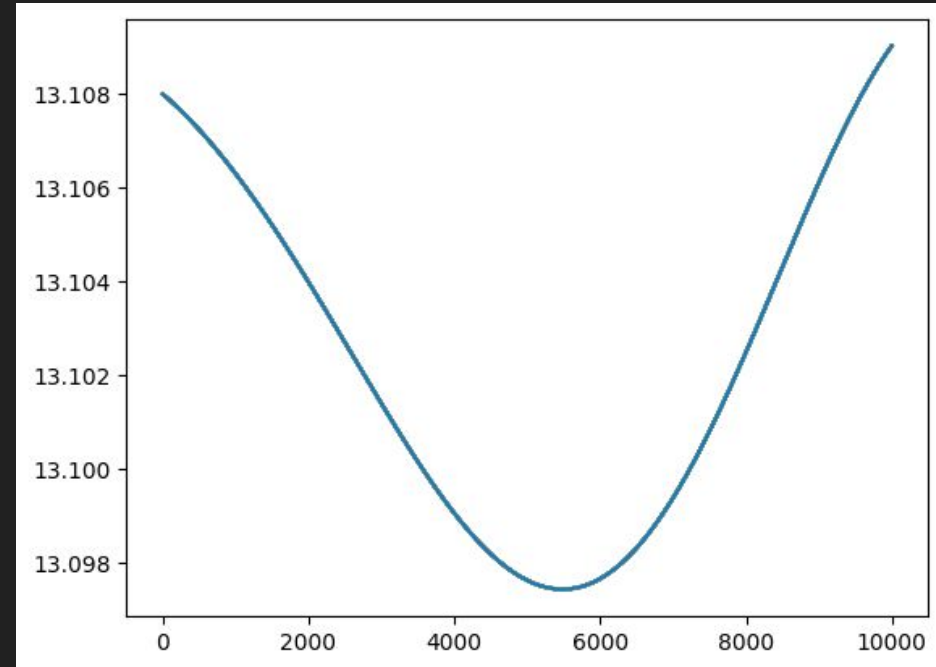
# Nodes = 10

Input: Sin wave

## Runge - Kutta Method



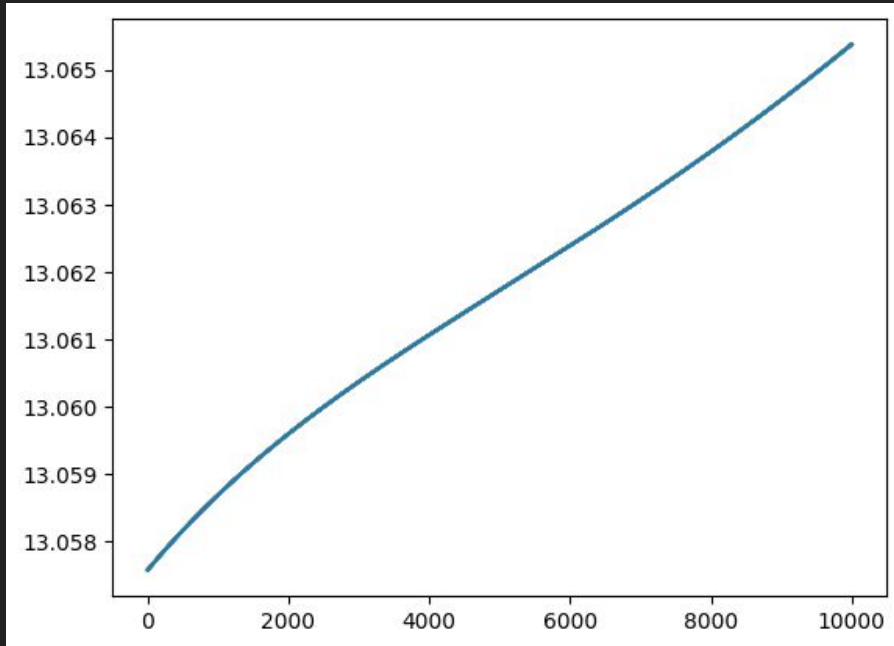
## ODE



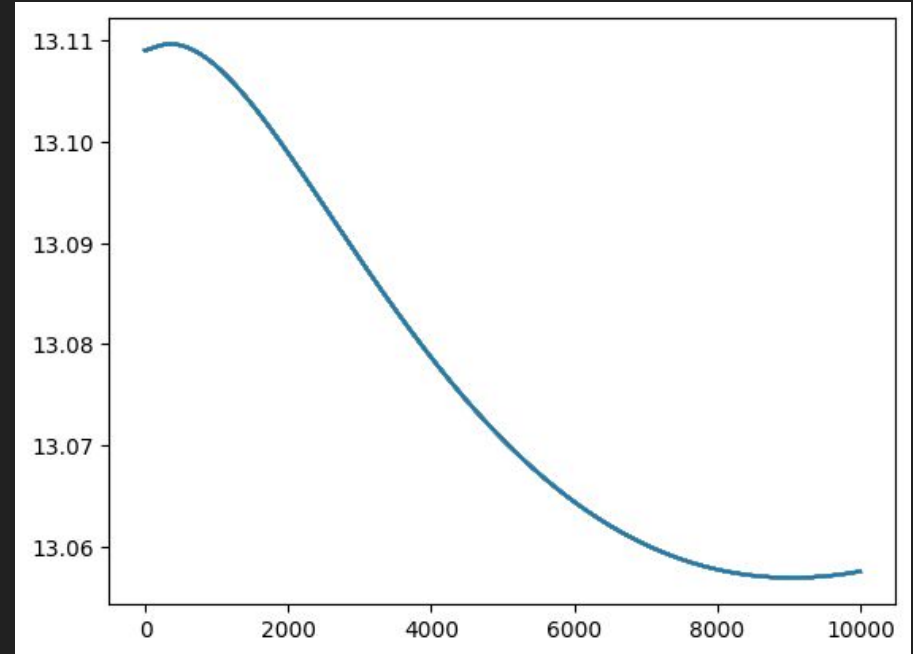
# Nodes = 10

Input: 5 units linear

## Runge - Kutta Method

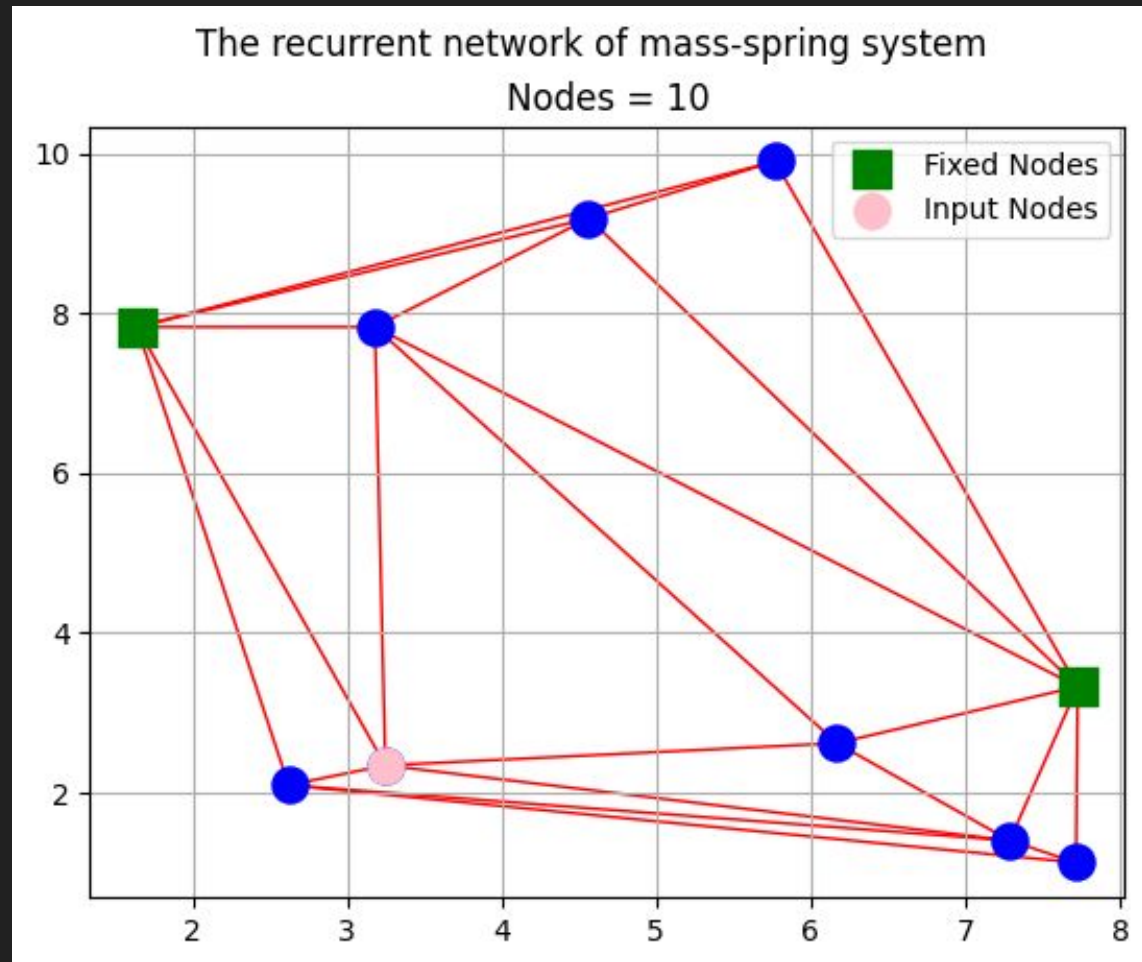


## ODE



# Simulation 2

Nodes = 10  
Network ->

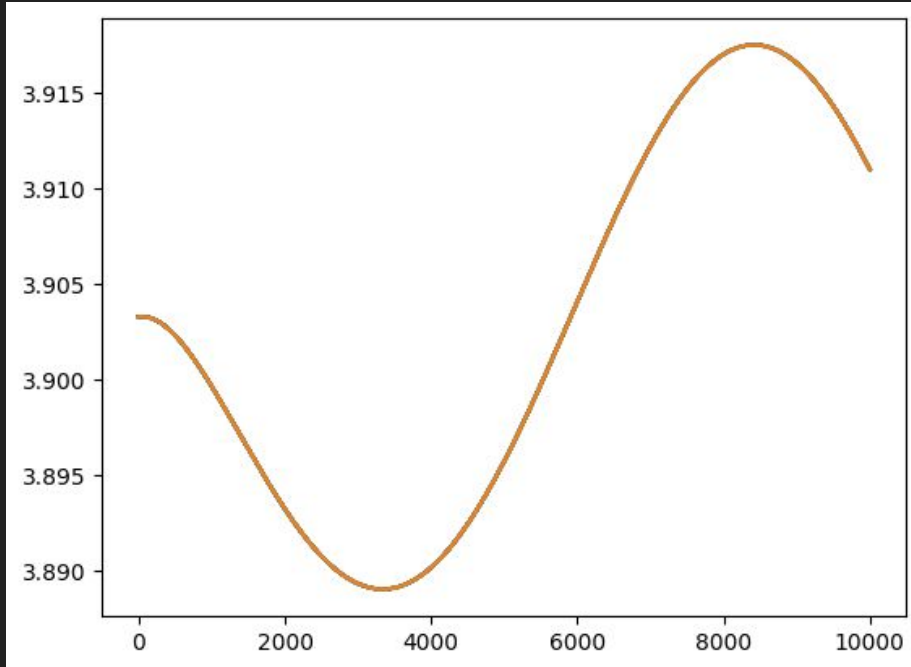




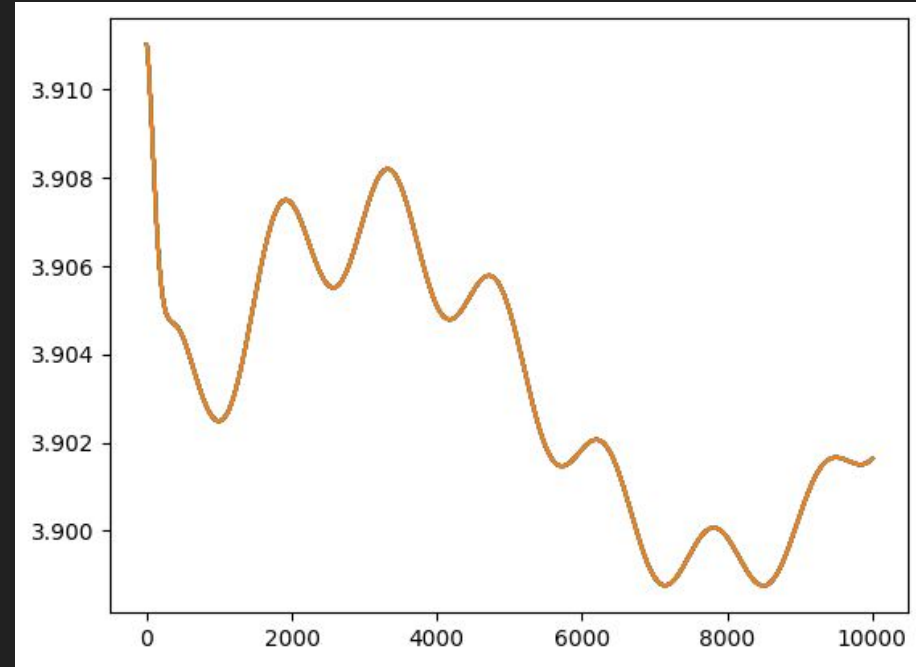
# Nodes = 10

Input: Sin wave

Runge - Kutta Method



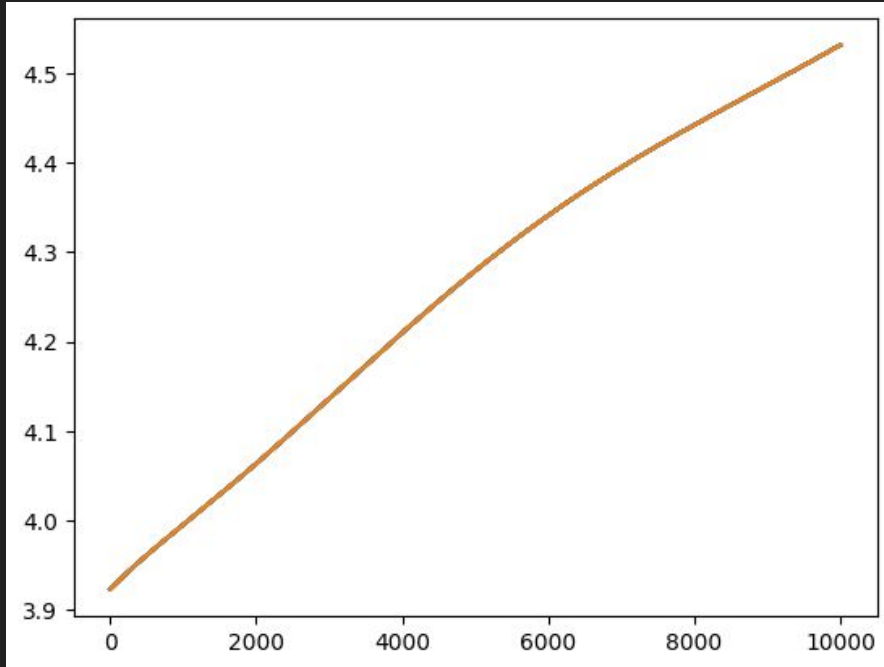
ODE



# Nodes = 10

Input: 5 units linear

Runge - Kutta Method



ODE

