

Programming assignment IV
ME685A – APPLIED NUMERICAL METHODS

13th April 2022

Measurement data of change in temperature versus time as recorded in an experiment is given below:

$\theta(t)$	63.3	52.2	38.1	27.9	19.2	11.4	6.3	2.9
Time t	10	30	60	90	130	180	250	300

Fit a function of the form

$$\theta(t) = a \exp(-bt)$$

using a nonlinear regression procedure along with the matrix regularization approach.

Hence determine the model parameters.

Report the regression coefficient in the model thus developed.

Upload the zipped file of your program and a report on MooKIT.