

Data Management and Artificial Intelligence Homework 4

Task 1 *Simple matplotlib exercise*

Draw the image of the function $y = x^2 - 2x - 2$, and use an arrow to indicate the minimum value of the function.

The desire output figure is:

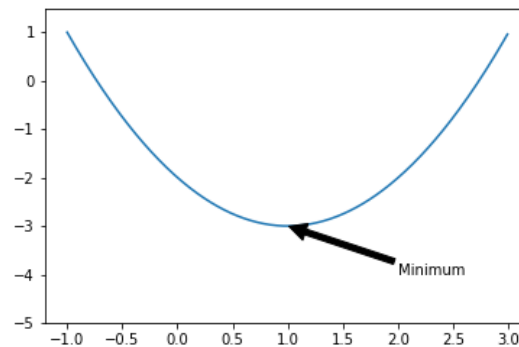


Figure 3: Figure of Task 1

Task 2 Draw the contrast diagram of damped oscillation ($y = e^{-x} \cos(2\pi x)$) and undamped oscillation ($y = \cos(2\pi x)$) of simple harmonic vibration.

The desire output figure is:

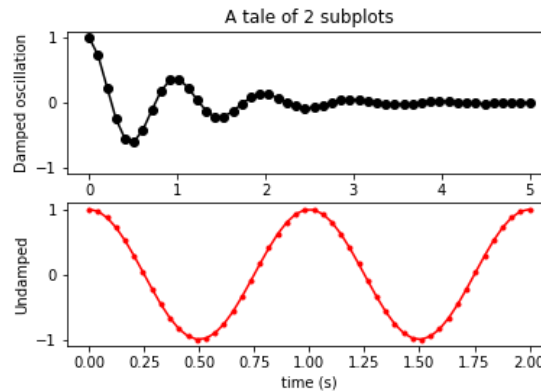


Figure 4: Figure of Task 2