MM2 – Chapter 9 – Section 5

Pre-Class Question:

Write a simple differential equation to solve the following equation in MATLAB:

$$\ddot{y} = x^{2/3}$$

Where y(0) = 2 and $\dot{y}(0) = 0$

Class Worksheet

1. Go through the proof of the Hamiltonian as a class.
2. Solve the pre-class question as a class
3. Find the equations of motion for a pendulum using the Hamiltonian.