# Operating Systems (SFWRENG 3SH3), Term 2, Winter 2023 Prof. Neerja Mhaskar

## Practice Lab 1 – For Apple users with M1 chip

### Outline:

This is a take home lab. In this lab you will install a virtual machine (hypervisor) suitable for your computer, and then install Ubuntu.

## Before you begin:

1. Before installing the virtual machine (VM) make sure to do a complete back up of your computer (my student lost all his data while installing VM!)

#### Installation:

- 1. I found on YouTube (<a href="https://www.youtube.com/watch?v=fTSnR2x9cy8">https://www.youtube.com/watch?v=fTSnR2x9cy8</a>) an explanation to install UTM (<a href="https://mac.getutm.app">https://mac.getutm.app</a>) (free virtual machine for MAC). I downloaded it on my MAC although I don't have the M1 chip.
- 2. After installing UTM, double click the installation package, and copy the
  - application in the Applications folder.
- 3. Launch UTM.
  - You may click on browse UTM gallery option on the welcome screen for UTM and choose an option with Ubuntu. Check if it has the standard development tools such as the below. If not install it.
    - gcc
    - make
    - ssh

In your first lab (Lab 2), you will be using this Linux image to practice loading and removing kernel modules. You are expected to have the virtual machine and Linux (from the textbook website) ready to work on Lab 2.