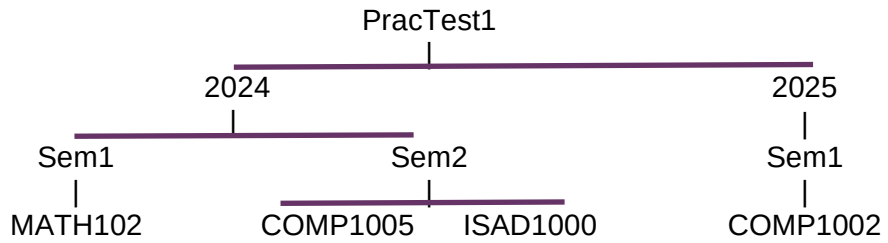
COMP1005/5005 - Practical Test 1

1. (1 mark) Create a directory tree of at least three semesters of your university study plan using the Linux command line, e.g.



2. Type in and modify a Python program: (2 marks)

Navigate to **`PracTest1/2024/Sem2/COMP1005`** type in the code on the right, then

Modify the code in **`PracTest1.py`** (see on right) to:

1. Correct any errors - get the given code working
2. Print alternating + and | characters (see sample output on right)
3. On each row, use a **for loop** to print the required + or --- characters
4. Add to code to have the user enter the number of rows and columns
5. For each user entry, **test that it is in a valid range**, use a loop to ask them to re-enter the year and continue looping until it is valid, You can assume the user enters an integer
6. After printing the grid, ask the user to enter a row and column within the grid (validate that the numbers are in range – counting from zero)
7. Print the grid again with an X in that position
8. Test your code with valid and invalid entries

3. README and history (1 mark)

1. Record the history of the commands used: **`history > hist.txt`**
2. Copy the **`README`** file from your Prac01 (or Prac00) directory to your **PracTest1** directory.
3. Update the **`README`** file to refer to files and directories you have created, use today's date and to include the **`PracTest1.py`** program and a short description of it.

4. Submission and Assessment

A tutor must assess your work when complete.

All of your work must be submitted via Blackboard through the link on the Assessment page. This should be done as a single "zipped" file. To make a zip file to include all the directories and files, go to your FOP directory and type:

`zip -r PracTest1_yourID PracTest1`

```
"""
PracTest1.py: Read number of rows/cols and print an ASCII grid

Student Name: <your name>
Student ID  : <your ID>
""
numrows = 3
numcols = 3

for row in range(numrows):
    if i%2 == 0
        print("*", end="")
print()
```

```
Enter number of rows in grid...-4
Out of range, please re-enter...
Enter number of rows in grid...3
Enter number of columns in grid...30
Out of range, please re-enter...
Enter number of columns in grid...3
+---+---+---+
|   |   |   |
+---+---+---+
|   |   |   |
+---+---+---+
|   |   |   |
+---+---+---+
Enter a row number...4
Out of range, please re-enter...
Enter a row number...2
Enter a columns number...1
+---+---+---+
|   |   |   |
+---+---+---+
|   |   |   |
+---+---+---+
|   | X |   |
+---+---+---+
```