Topic 9 - Activities

Lab 01

Create a Python module to create the following Excel spreadsheet (shown below) using **openpyxl** module. Use a **random** number generator (20-100) to generate the sales in each cell

	A	B	C	D	E
1	Product	Store 1	Store 2	Store 3	
2	Tablets	30	45	65	
3	Phones	40	30	88	
4	Furniture	40	25	22	
5	Stationery	30	45	55	
6	Printers	30	25	60	
7	Laptops	25	35	35	
8	Desktops	20	40	42	
9					

Lab 02

Create a new Python module to read each row of the **students.xlsx** file into a **Student** object (which you need to create with the appropriate fields – *see product.py for guidance*). Add each **Student** instance to a **list** and print the product **Student Id** and **Name** only

Lab 03

Using the spreadsheet, you created in **Lab 01**, create a **Bar Chart** to display the sales of the various **Products** for each **Store** (*each bar will represent a store, X axis will be the product name*)

Lab 04

Using the Excel spreadsheet **covid.xlsx**, write a Python program that reads all the data from this file and create a **Line Chart** showing the variation of infected cases over the 12-month period

Include appropriate labels in this chart.

Lab 05 – Challenge Exercise

Create a Python module to add 5 **Product** objects to a list and use this list to create and populate an **Excel** spreadsheet with each column value mapped to each **Product** instance field and the number of rows should correspond to the number of **Product** instances in the list. This is a reverse of **Lab 02.**