School of Mathematics and Statistics
Te Kura Mātai Tatauranga

DATA304/COMP312/DATA474 **Tutorial 4** **Week 4**

Part 1 — Python

1 Art lover, Klaus, enters the art gallery and admires the `Npictures` hung on the walls. He examines each picture for `lookTime` minutes, and remarks `Very nice` before going on to the next one. When he finishes he leaves the art gallery saying `How Refreshing!`.

Write a SimPy simulation program to model this situation. The print statements should include the time and Klaus's name. Set `Npictures = 20` and `lookTime = 2.5`. pyt198

2 Art lover, Klaus, enters the art gallery and admires the `Npictures` hung on the walls. He examines each picture for a random time. He remarks `Very nice` before going on to the next one. When he finishes he leaves the art gallery saying `How Refreshing!`.

Write a SimPy simulation program to model this situation. Use a trace method which prints only if `TRACING` is `True`. It should display the time and the art lover's name. Set `Npictures = 20` and `lookTime = 2.5`. The time in minutes spent looking at a picture has a `uniform(1,lookTime)` distribution. Use a random seed of 123. pyt199

3 Art lovers, Klaus, Evelyn, Virginia, and Tony enter the art gallery at intervals of 1 minute. They independently walk round and admire the `Npictures` hung on the walls. They examine each picture for a random time. They remark `Very nice` before going on to the next one. When finished, each leaves the art gallery saying `How Refreshing!`.

Write a SimPy simulation program to model this situation. Use a trace method which prints only if `TRACING` is `True`. It should display the time and the art lover's name. Set `Npictures = 10` and `lookTime = 2.5`. The time in minutes spent looking at a picture has a `uniform(1,lookTime)` distribution. Use a random seed of 123. pyt200