secure Scripting: (PYTHON)

**Advanced scripting**

# unit 3 Lab solutions

### Lab Exercise 1

The format of the "connect.csv" file is given on the slides. Please write a script that prints the date and time fields of each line of the file. The first line's fields should contain "DATE" and "TIME", respectively. Save the script as “ipconn1.py”.

Hint: You can adapt the *while* loop on Slide 12 for this.

See the script ipconn1.py in 15.SeSPython\_Unit3\_AdvancedScripting\_LabScripts.

### Lab Exercise 2

Modify your script “ipconn1.sh” from Lab Exercise 1 to add a field called "TIMESTAMP" between the TIME and DURATION fields. Populate this field with the result of converting the contents of the DATE and TIME fields for that line to the number of seconds since the epoch (the \*nix timestamp). Save the script as “ipconn2.sh”; save the resulting output in a file named "connect-ts.csv".

Hint: The first line consists of the headings, so add the heading for this new field in the appropriate place.

See the script ipconn1.py in 15.SeSPython\_Unit3\_AdvancedScripting\_LabScripts.

### Lab Exercise 3

Write a script to print the first and last timestamp in the file "connect-ts.csv", followed by the difference in seconds between the two timestamps. Save the script as “ipconn3.sh”.

When you test the script, notice how hard it is to understand the large number of seconds as a meaningful duration of time. Convert the number in seconds into an output in the form “*hh*:*mm*:*ss*” where *hh*, *mm*, and *ss* are hours, minutes, and seconds respectively.

Hint: Use the program *expr* to divide by 60, then to divide the remainder by 60.

See the script ipconn1.py in 15.SeSPython\_Unit3\_AdvancedScripting\_LabScripts.