IT 3110: Systems Automation
Shell Scripting

Assignment
This assignment will hone your skills as a Bash shell programmer.

Description
For this assignment you should create a script that receives a command-line argument of an IP address and does the following:

- Presents a menu of options to the user
  - 1 - Test if host is awake -> this will send a single ping to the remote host. If the host is awake, your script should print out something like “ip is awake” (replace ip with the actual ip address), otherwise it will print something like “ip is not awake”.
  - 2 - Get process status on remote host -> if this is selected, it will prompt the user for what service the script will check for. The script will then get the service status on the remote host. (Remember you can manually see the service status by doing [service ssh status] (replace ssh with whatever service that the user selected)). You will have to do some grepping and awking to just get the actual status. I.e. I can grep this line |Active: active (running) since Fri 2022-01-07 09:56:13 MST; 1 months 4 day> to get the second word. So, the script will just print out that second word.
  - 3 - Get disk percentage used on root filesystem -> will return just the percentage field for the root [/] filesystem on the remote machine. Hint: You can get the whole line for the [/] by doing [df | egrep '/$']. You would then need to awk it to just give the percent field.
  - 4 - Get hostname of remote machine -> returns the hostname command results
  - 5 - Quit - Will quit the script

Submission
- Demo in class