NSSA244 Virtualization
Scripting Assignment I

For this assignment, you will be writing a script to automate the deployments of virtual machines on a host system. The script will use a menu-driven interface to prompt the user to create a virtual machine and configure various settings, mostly the virtual hardware. The menu will also provide options to start, stop, and delete the virtual machine.

Depending on the platform, you can write the script in PowerShell to deploy virtual machines in Hyper-V. Or Python for deploying virtual machines using Virtual Box.

Please Note: This is individual work. Watch for copying code and technique.

The preferred language is Python 3.5.2 but substitutes are acceptable. Not liking or never using Python is not a good reason for a substitution because Python is a major language used for tasks like these. In addition, if you use something like PyCharm or Anaconda you will not be allowed to make program structure mistakes.

Task 1 (25%) – Create a text-based menu that gives the user the following options to select:

- Create a VM
- List the available VMs
- Start a VM
- Stop a VM
- List the settings of a particular VM
- Delete a VM
- End the program

Task 2 (50%) – Write the code that accomplishes each of the above tasks.

Task 3 (25%) – Documentation

- Your program must be meticulously commented.
- Your program must have your name at the top of the code
- At the bottom of your code, include the sources that you used to help you complete this assignment.

Hints: In the class slides I showed you examples of two of these tasks. Individually these are simple operations so figure out the command you need and then figure out how to get it into your program. The main challenges will be how to do a menu and how to call a VBox command in Python or Hyper-V comlets from within the program.