1. 1. The output is: Linux CS-Ubuntu 5.15.0-58-generic #64-Ubuntu SMP Thu Jan 5 11:43:13 UTC 2023 x86\_64 x86\_64 x86\_64 GNU/Linux
   2. The first field is the kernel, or operating system, the virtual machine is running. In this instance, the name of the kernel is Linux.
   3. The second field is the hostname of the system. The hostname of the virtual machine is CS-Ubuntu which I named while setting up the virtual machine.
   4. The third field is the kernel release, or the current release version of the operating system. In my case, it is 5.15.0-58-generic.
   5. The fourth field is the kernel version. The kernel version displays the date when the kernel was first built. For me, it displays #64-Ubuntu SMP Thu Jan 5 11:43:13 UTC 2023.
   6. The fifth field is the name of the machine hardware. Because Linux is using a virtual machine, it doesn’t display the name of my laptop’s hardware so it displays x86\_64.
   7. The sixth field displays the processor. It displays the same output as above: x86\_64. This is because it is running on a virtual machine.
   8. The seventh field displays the hardware platform. It displays the same output as above: x86\_64. This is because the operating system is running on a virtual machine.
   9. The eighth and last field displays the operating system name. For me it displays GNU/Linux.
2. The servers likely are synched to one another meaning that changes made on one server will also be made on the other. Additionally, the servers could perhaps be the same server that are accessed with different hostnames.
3. The output is: Linux hopper 3.10.0-1160.53.1.el7.x86\_64 #1 SMP Fri Jan 14 13:59:45 UTC 2022 x86\_64 x86\_64 x86\_64 GNU/Linux. The differences are the kernel versions and releases. The CSUEB servers are likely running a different Linux distribution and rebuilt the kernel more recently than when I built mine. Both the server and my virtual machine are using x86\_64 architecture.
4. The output is: Linux RedHat-038 2.6.32-696.1.1.el6.x86\_64 #1 SMP Tue Mar 21 12:19:18 EDT 2017 x86\_64 x86\_64 x86\_64 GNU/Linux. The differences are the kernel versions and releases. The version of Linux being used by this cloud service in Red Hat Enterprise. The last time the kernel was built was nearly 2 years ago. The architecture the system is using is x86\_64 which is the same as my virtual machine.

Hello world