**NOTE:  Please follow good software engineering practices.  In addition to a working program, unit tests should be produced.  Treat this as if it was production code being delivered to a client.   It should be properly packaged and delivered with sufficient documentation and instructions also provided. You must also describe how to deploy and monitor your solution.**

**Step 1**

Create 3 Linux VMs, you can create the VMs on the cloud (AWS, Google, Azure), or on your local machine using the virtualization tool of your choice.

**Step 2**

Create an application that lets you input “x” number of server IPs separated by comma (eg.10.10.10.1, 192.168.1.1, etc), with these IPs you will connect to each server (Linux servers) previously created, and perform the following tasks:

* Log the current running processes (one single interval).
* Log the top 3 application that are consuming more CPU and top 3 that are consuming more Memory resources
* Log how much capacity is remaining on each running VM
  + Display that capacity in a meaningful human and machine readable form
* You will log the output on a file
  + The output must contain the server ip and the information previously requested

**Special considerations**

You can use the language and framework of your choice for the backend

Create unit test(s)

Provide the resulting log file and the application that you developed

Based on the information that you are getting from the VMs (CPU and memory utilization), explain how the resources consumed by those top processes affects or correlates to the available capacity.