Module System Information

How to Start Module:

- Before starting the module, Run the <module_script_name> to configure the environment and then <module_script_name> to verify you have done the work correctly
    1. Open a Terminal Window
    2. Clone the GitHub repo (If you have already downloaded Github Repo, skip Step2) (https://github.com/milodigwe/Linux_Essentials_m2itech)
        - From the command line type:
          git clone https://github.com/milodigwe/Linux_Essentials_m2itech
    3. Once repository is cloned, navigate to the Hands_On Folder and find the script named: **system_information.sh**
    4. Run the system_information.sh script: This will configure the environment for the hands-on module
        - **sh ./system_information.sh**
        - The script will ask you for your public IP of your instance (which you can find in your aws console) and your key_pair (which you downloaded and assigned to instance during the ec2 creation process) to log into your instance.
    5. Once the script is finished it will provide you with an output on how to log into the system.
        - Should look like: ssh -i <path to key pair> ec2-user@<ip address>
    6. Once logged in to the instance, Perform the required tasks below.
    7. To verify that you have performed the task correctly. You will need to run the **system_information_check.sh** script located in /home/ec2-user directory.

- **system_information_check.sh** You must score a 100% to pass this module.

8. Please Note * Terminate or Stop your instance when not using it

HAPPY LEARNING!!!

Questions:

Note. These files will need to be created.

Lab 1: Display the current system information using the "uname "command. Only display the nodename, kernel name and operating system in one command. Output these results to /home/ec2-user/results/uname_find.txt

```
[ec2-user@ip-172-31-27-40 ~]$ uname -sno
Linux ip-172-31-27-40.ec2.internal GNU/Linux
[ec2-user@ip-172-31-27-40 ~]$ uname -sno > results/uname_find.txt
[ec2-user@ip-172-31-27-40 ~]$ cat results/uname_find.txt
Linux ip-172-31-27-40.ec2.internal GNU/Linux
```

Lab 2: Use the df command to find the total disk space size of the "devtmpfs" and write the size in human readable format output to /home/ec2-user/results/disk_find.txt

```
[ec2-user@ip-172-31-27-40 ~]$ df -h --total | grep devtmpfs | awk '{print $2}'
4.0M
[ec2-user@ip-172-31-27-40 ~]$ df -h --total | grep devtmpfs | awk '{print $2}' > results/disk_find.txt
[ec2-user@ip-172-31-27-40 ~]$ cat results/disk_find.txt
4.0M
[ec2-user@ip-172-31-27-40 ~]$
```

Lab 3: Using the du command find the total directory space of /var/log in human readable format. ** note you will have to use the sudo command before you type du. Add the results to /home/ec2-user/du_find.txt.

```
[ec2-user@ip-172-31-27-40 ~]$ sudo du -h /var/log --total
16M     /var/log/journal/9721ff4b8b7941858c1604d6a4485c8f
16M     /var/log/journal
0       /var/log/private
0       /var/log/sssd
132K    /var/log/chrony
260K    /var/log/audit
4.0K    /var/log/amazon/ssm/audits
16K     /var/log/amazon/ssm
16K     /var/log/amazon
12K     /var/log/sa
18M     /var/log
18M     total
[ec2-user@ip-172-31-27-40 ~]$ sudo du -h /var/log --total | tail -n1 | awk '{print $1}' > results/du_find.txt
[ec2-user@ip-172-31-27-40 ~]$ cat results/du_find.txt
18M
[ec2-user@ip-172-31-27-40 ~]$
```

Lab 4: Using the top or ps command, find the first processes that owned by the root user. Locate the pid of systemd which is owned by root and write that process number in /home/ec2-user/results/top_find.txt

```
[ec2-user@ip-172-31-27-40 ~]$ sudo ps -u root | head -n2
    PID TTY          TIME CMD
      1 ?        00:00:01 systemd
[ec2-user@ip-172-31-27-40 ~]$
```

```
[ec2-user@ip-172-31-27-40 ~]$ sudo ps -u root | head -n2 | awk '{print $1}' | tail -n1
1
[ec2-user@ip-172-31-27-40 ~]$ sudo ps -u root | head -n2 | awk '{print $1}' | tail -n1 > results/top_find.txt
[ec2-user@ip-172-31-27-40 ~]$ cat results/top_find.txt
```

Run the Check Script:

```
1. Checking system information using uname in uname_find  PASS

2. Checking total disk space size of devtmpfs in disk_find.txt  PASS


3. Checking total directory space of /var/log in du_find.txt. PASS

4. Checking the first process owned by root in top_find.txt.  PASS


Score: 4 / 4
Your score is 100%, You have passed this module!! PASS

Number of Correct : 4 / Number of Fail : 0
[ec2-user@ip-172-31-27-40 ~]$
```