Readme:

Name of the Application: NiceTestApp.py

Application “NiceTestApp” is a python-based application which will provide the system information.
NiceTestApp.exe – for windows-based OS
NiceTestApp – for Linux-based OS

- Requirement: - Utils being used to build the application on Linux &Windows OS – **Yum, epel, Python3, pip3, Wheel, pyinstaller**

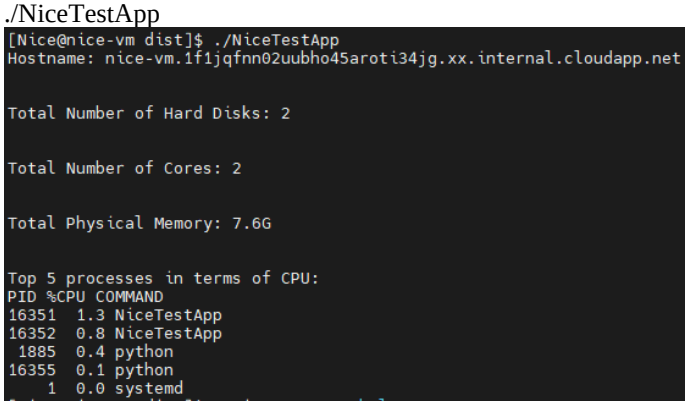
- Libraries imported for application development
  platform, subprocess, sys, os, psutil

- OS version for testing the application: -
  - Linux OS used – Red Hat Enterprise Linux Server release 7.9 (Maipo)
  - Windows OS used – Microsoft Windows 10.

- Results of application execution –

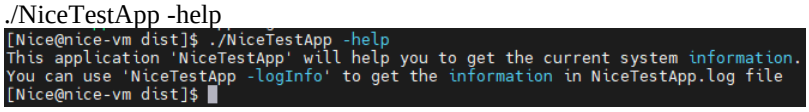
*Linux Based Application execution–

./NiceTestApp

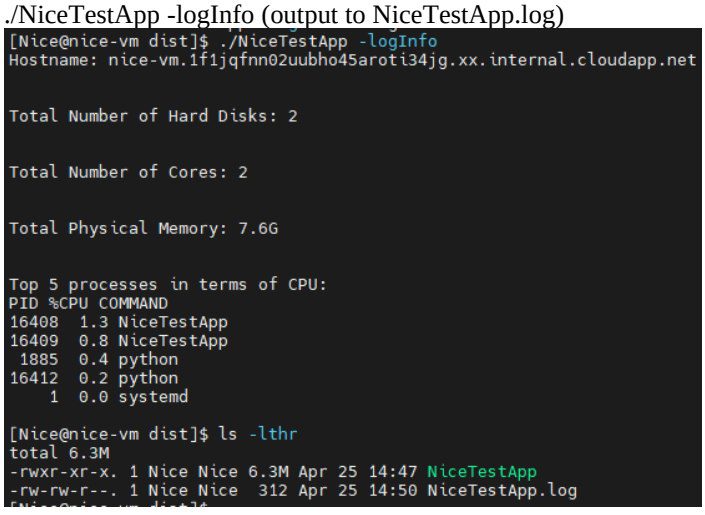


-With Argument’s

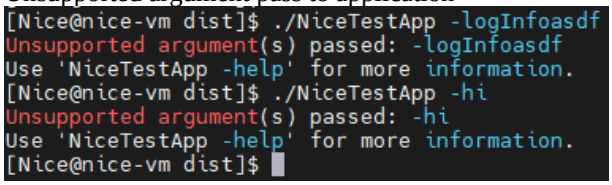
./NiceTestApp -help



./NiceTestApp -logInfo (output to NiceTestApp.log)



Unsupported argument pass to application -



*Windows Based Application execution –

./NiceTestApp.exe

```
25/04/2024  21:01.29  /drives/g/Python_Nice/win_linux6_2/dist  ./NiceTestApp.exe
Hostname: DESKTOP-MN80HD5


Total Physical Memory: 4,026 MB


Total Number of Cores: 8


Total Number of Hard Disks: 6



Top 5 processes in terms of CPU:
PID: 0, Name: System Idle Process, CPU Percent: 0.0%
PID: 4, Name: System, CPU Percent: 0.0%
PID: 8, Name: fontdrvhost.exe, CPU Percent: 0.0%
PID: 56, Name: , CPU Percent: 0.0%
PID: 108, Name: Registry, CPU Percent: 0.0%
```

-With Argument's (-help and -logInfo)

./NiceTestApp.exe -help

```
25/04/2024  21:01.40  /drives/g/Python_Nice/win_linux6_2/dist  ./NiceTestApp.exe -help
This application 'NiceTestApp' will help you to get the current system information.
You can use 'NiceTestApp -logInfo' to get the information in NiceTestApp.log file
```

./NiceTestApp.exe -logInfo (output to NiceTestApp.log)

```
25/04/2024  21:02.38  /drives/g/Python_Nice/win_linux6_2/dist  ./NiceTestApp.exe -logInfo
Hostname: DESKTOP-MN80HD5


Total Physical Memory: 4,026 MB


Total Number of Cores: 8


Total Number of Hard Disks: 6



Top 5 processes in terms of CPU:
PID: 0, Name: System Idle Process, CPU Percent: 0.0%
PID: 4, Name: System, CPU Percent: 0.0%
PID: 8, Name: fontdrvhost.exe, CPU Percent: 0.0%
PID: 56, Name: , CPU Percent: 0.0%
PID: 108, Name: Registry, CPU Percent: 0.0%



25/04/2024  21:07.09  /drives/g/Python_Nice/win_linux6_2/dist  ls -lthr
total 3439
-rwxr-xr-x    1 HP       UsersGrp    6.7M Apr 25 21:00 NiceTestApp.exe
-rwxr-xr-x    1 HP       UsersGrp     414 Apr 25 21:07 NiceTestApp.log
```

Unsupported argument pass to application –

```
25/04/2024  21:07.14  /drives/g/Python_Nice/win_linux6_2/dist  ./NiceTestApp.exe hello
Unsupported argument(s) passed: hello
Use 'NiceTestApp -help' for more information.
```

Note :-

If we run direct python code using python command (main python code – python NiceTEstApp.py) instead of build application, It will identify the current OS and execute the Windows or Linux code accordingly.

On Windows

```
25/04/2024  21:24.55  /drives/g/Python_Nice/win_linux6_2  python NiceTestApp.py
Hostname: DESKTOP-MN80HD5


Total Physical Memory: 4,026 MB


Total Number of Cores: 8


Total Number of Hard Disks: 6



Top 5 processes in terms of CPU:
PID: 0, Name: System Idle Process, CPU Percent: 0.0%
PID: 4, Name: System, CPU Percent: 0.0%
PID: 8, Name: fontdrvhost.exe, CPU Percent: 0.0%
PID: 56, Name: , CPU Percent: 0.0%
PID: 108, Name: Registry, CPU Percent: 0.0%
```

On Linux

```
[Nice@nice-vm win_linux6_2]$ python3 NiceTestApp.py
Hostname: nice-vm.1f1jqfnn02uubho45aroti34jg.xx.internal.cloudapp.net


Total Number of Hard Disks: 2


Total Number of Cores: 2


Total Physical Memory: 7.6G


Top 5 processes in terms of CPU:
PID %CPU COMMAND
20656  0.6 python3
 1885  0.4 python
20659  0.1 python
    1  0.0 systemd
    2  0.0 kthreadd
[Nice@nice-vm win_linux6_2]$
```

Thanks,

Prashish