Computer Information Application

Create a simple application in Python that can be run from the command line and outputs the information to the command line, and optionally to a log file. Your application should meet the following requirements. You will be evaluated on whether the application meets the requirements spelled out below, as well as in how you implemented the code:

Name of Module or Library: *NiceTestApp.py*

Arguments it should take:

Argument	**Purpose**
`-logInfo`	This is a simple switch parameter. If it is specified, the information about the computer will also be written to a log file. The log file will be named the same as the *.exe with the exception of the file name extension which will be *.log. Thus, the log file should be *NiceTestApp.log*. It should be located in the same folder as the application file. If this parameter is NOT specified, no log file will be generated.
`-help`	When this parameter is specified, the application should display a short message on the screen with the arguments that is supports and what the arguments do.

Required Calling Convention

`NiceTestApp.py -loginfo`

When invoked as show above, the application will display the information about the computer on the screen and log it to disk.

`NiceTestApp.py`

When invoked as show above, the application will display the information about the computer on the screen. No log file will be generated.

NiceTestApp.exe -help

When invoked as shown above, the application will show a short help message displaying the arguments that is supports and what they do and then exit.

Required Output

The output should be displayed on the screen and logged to disk if the -loginfo parameter is specified.

Label	Information to show
Computer Name	Fully qualified name of the computer on which the application is running
Total Physical Memory	Show the total physical – not virtual – memory installed on the computer
Total Number of Physical Processors	List the number of processors installed on the computer. This should be the number of physical CPUs installed, not cores.
Total Number of Cores	List the number of total cores (Number of Physical Processors * Number of Cores Per Processor) available on the system
Total Number of Hard Disks	List the number of hard disks installed on the computer. Do NOT list the number of partitions. Just the number of hard disks. Do not include any other disks such as floppy or DVD disks or attached network drives.
Top 5 processes in terms of CPU	Provide a list of the top 5 processes that, at the time the application is executing, consume the most CPU. Print/log the name of the processes followed by the percent of the CPU it is currently consuming.

Computer Name: *[name of computer on which app is running]*

Total Physical Memory: *[Total amount of physical memory formatted in Gb available on the machine]*

Sample Output

```
Computer Name: MyLapTop

Total Physical Memory: 8 Gb

Total Number of Physical Processors: 2
```

Total Number of Cores: 8

Total Number of Hard Disks: 2

Top 5 processes in terms of CPU:

Process1: 10%

Process2: 8%

Process3: 1%

…..