TRIAGE UNIT
TOPIC 4 – WORKSHEET 2
LINUX TRIAGE COMMANDS – THE PROCESSOR

The focus of the triage process is finding if the primary 3 components of a computer are present and working. These components are the processor, the Random Access Memory (RAM), and a hard drive with sufficient space. The Linux operating system has many commands that show computer hardware components. In this lesson we will look at some of the Linux commands that list the computer's parts.

Finding the Computer's Processor

The computer's brain is a chip or more technically called, a microprocessor. This processor chip is also called the CPU or "central processing unit." It does all the "thinking" in your computer. In most modern Linux versions there is a "lscpu" command that will list (ls) approximately 35 lines of information about the computer's processor chip (cpu).

```
user@host:~$  lscpu
```

So that was easy. If you are in a hurry, run the lscpu command, fill out the triage form and move on to find the memory information. If you want to play with a few more commands, read on.

The OS (operating system) will sometimes need to know which processor is running the show in the computer so Linux will load this and other information into a folder called "/proc." In the /proc folder there is a file named "cpuinfo." to list the information in a file directly onto your screen you can use the "cat" command. The "cat" command stands for concatenate and it can be used to paste the contents of one file into another or concatenate them. Or it can just list a file on screen. To list the contents of the cpuinfo file just issue the following command.

```
user@host:~$  cat  /proc/cpuinfo
```

Finally, there is the Linux command that has all the hardware information you could possibly want. The "lshw," or list (ls) (H)ard(W)are command will spit out more than 500 lines of information about the guts of your computer. It will even print a web page that shows the output. Since we only want the processor information (right now) run the lshw command with the following options:

```
user@host:~$  lshw  -c  processor
```

The "-c" flag stands for "class," and processor is the class of hardware you are seeking. If you look closely at the output you will see a warning to run the command as the "super user" or "root." To run a program as the root user, simply put the "sudo command in front, as follows:

```
user@host:~$  sudo  lshw  -short
```

this usage will give you a summary of many of the classes of hardware in your computer.

Answer the questions on the back of this page

Questions:

Which of the CLI Commands do you prefer for processor information? _____

Why? _____

_____

Can you explain at least one difference between processors? You might need to do an internet search to answer. _____

_____

_____

Why is it important to know which processor a computer has when refurbishing? _____

_____

_____

Extra Credit

If you want to see the output of all your computer's hardware in a web page, issue the following commands:

```
user@host:~$ sudo lshw -html > computerhw.html
```

You will have to type in your password. Then type:

```
user@host:~$ firefox computerhw.html
```

Can you explain how these commands work? _____

_____

_____

_____