**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

### Question 1 (2 points)

Do project 8-1.  
  
For the **dd** command what does *if* stand for?  Blank 1 in file  
  
For the **dd** command what does *of* stand for?  Blank 2 out file  
  
For the **dd** command what does *conv* stand for? Blank 3 convert

Answer

### Question 2  (2 points)

Do project 8-2.  
  
What does the **df** command stand for?

Answer  disk filesystem

### Question 3 (2 points)

Do project 8-3.  
  
What does the **du** command stand for?

Answer disk usage

### Question 4 (4 points)

Do project 8-4.  
  
Why should you monitor and remove garbage files?

Answer

Garbage files may take amount of disk usage which may slow down our computer’s performance.

We monitor garbage files because we many times don’t know when and what programs produce these files including, temp files, log files and some others.

### Question 5 (4 points)

Do project 8-5.  
  
What does the **top** command do?    
top command can monitor our computer’s CPU, memory usage. It also provides process information and offer us many operations on these processes. Another alternative command is htop.  
  
What is the default refresh rate?

Answer

every 3 seconds

### Question 6 (4 points)

Do project 8-6.  
  
What does the **free** do?

Answer

Free command shows us the memory usage information.

### Question 7 (2 points)

Do project 8-7.  
  
You can redirect the output from the **top** and **free** commands to an output file.

Answer

True

False

### Question 8 (2 points)

Do project 8-8.  
  
What does the & do when used with a command?

Answer

& make a command runs in background.

### Question 9 (4 points)

Do project 8-9.  
  
How is the **ps** command similar to the **top** command?  
  
Both ps and top can show running processes.

How does the **ps** command differ from the **top** command?

Ps show process formation when we hit the command while top will monitor dynamically.

### Question 10 (4 points)

Do project 8-10.  
  
  
Why would you use the **kill** command?  
  
Kill command can send signal to a process. We can communicate with a process with kill command. For example, we want to use kill -9 to kill a process that is not respond.  
  
What does the option **-9** do?

Kill -l command shows, -9 is KILL, which kill a process.

### Question 11 (4 points)

Project 8-12.  
  
What output does the **cmp** command give?

Answer

Cmp give the difference of different files.

### Question 12 (4 points)

Do project 8-16.  
  
The **ifconfig** command allows you to view and modify a UNIX/LINUX installation network settings.  
  
What is the Microsoft Windows equivalent to this command?

Answer ipconfig

### Question 13 (4 points)

Do project 8-17.  
  
When issuing the **ping** command on a UNIX/LINUX installation how does it differ from the ping command found on Microsoft Windows?

Answer

When I issue,

ping www.yahoo.com > test.txt

In windows, it worked perfectly fine, but in Linux it just keeps replying without end. As a result, nothing is being written on test.txt as the command does not finish executing.

### Question 14 (4 points)

Do project 8-19.  
  
What does the –n option do when used with the netstat command?

Answer

From linux manpage, -n means do not do any DNS or service lookups on any specified addresses, hostnames or ports.

### Question 15 (14 points)

Dump levels:  
•    0 is a complete system backup  
•    1 is a backup of all files that have changes since the dump 0 backup  
•    2 is a backup of all files that have changes since the dump 1 backup  
•    3 is a backup of all files that have changes since the dump 2 backup  
•    4 is a backup of all files that have changes since the dump 3 backup  
•    5 is a backup of all files that have changes since the dump 4 backup  
•    6 is a backup of all files that have changes since the dump 5 backup  
•    7 is a backup of all files that have changes since the dump 6 backup  
•    8 is a backup of all files that have changes since the dump 7 backup  
•    9 is a backup of all files that have changes since the dump 8 backup  
  
  
Devise a back up strategy.  Your company works seven days a week, however, Sunday night is a slow night with little computer activity. You would like to do a level 0 dump once a week.  Then only back up the changes from previous back the other six days a week.   
How would you structure your backups:  
  
Just put in the dump number:  
Sunday  Blank 11  
  
Monday Blank 2 2  
  
Tuesday Blank 33  
  
Wednesday Blank 44  
  
Thursday Blank 55  
  
Friday Blank 66  
  
Saturday Blank 70

### Question 16 (10 points)

Your system crashes on Friday.  How would you restore your system using the dump levels that were used in the previous questions  
  
Just put in the dump number:  
Blank 15  
  
Blank 2 4  
  
Blank 33  
  
Blank 42  
  
Blank 51

### Question 17 (5 points)

What the command to how space is allocated in the system.   Show it in Human Readable format and show the type of file system.

Answer df -h

### Question 18 (5 points)

Write the command to check the disk usage of your home directory.  Show the usage date in human readable format and then use the **sort** command it from largest to smallest and then pipe it through the **less** command.

Answer du -h | sort | less

### Question 19 (5 points)

This command shows how long the computer/server has been running since the last reboot.

Answer uptime

### Question 20 (5 points)

Write the command that shows the memory of the computer in megabytes.

Answer free -m

### Question 21 (5 points)

Write the command to capture the **top** command statics that will update 6 times at 10 second intervals/delay and redirect to a file called *top\_data*.  
  
**Hint:** The total time this command should run is 1 minute.

Answer top -d 10 -n 6

### Question 22 (5 points)

Write the ps command to see all running processes running on the UNIX/LINUX machine and pipe it through the less command.

Answer ps -ef | less