****Passed LPIC Questions from the Mr Tux Website****

Questions

1. When operating in command mode, which keys enable you to move the cursor in the Vi editor?

a, s, d, f

h, j, k, l

q, w, e, r

z, x, c, v

2. Which command will create an image of the /dev/sdai disk partition and place that image into a file called output. img?

dd if=sda of=/dev/sda1

dd if=output.img of=/dev/sda1

dd if=/dev/sda1 of=output.img

echo /dev/sda1 > output.img

3. Which command can be used to kill all processes by using their name?

killprocn

killname

killall

kill -f

4. What command can be used to view the current settings for your environment when using Bash? environment

env

listenv

echoenv

5. Which command is used to send contents of a bzip2 archive toSTDOUT?

bzout

bzcat

bz2cat

bz2echo

6. You need to declare a local environment variable that will then be available to child processes. Which of the following commands accomplishes this task?

ex echo ${\rm dec}$ export 7. Which of the following regular expressions would find the pattern steve or steve in a file when used with grep? '[sS]teve' '[S]*teve' $^{`1}$ teve $^{'}$ '[\$Steve]' 8. Which command can be run to determine the default priority for processes spawned by the current user? prio nice renice defpriority 9. You need to start a long-running process that requires a terminal and foreground processing. However, you cannot leave your terminal window open due to security restrictions. Which command will enable you to start the process and return at a later time to continue the session? fg bg kill screen 10. What will be the result if the touch command is executed on a file that already exists? The access time stamp of the file will change to the current time when the touch command was executed The file will be overwritten. There will be no change. The file will be appended to $^{1}\mathrm{Ss}$

	and tail commands?
-1	
-f	
-g	
-n	
12.	Assume that you have a file called zips.txt that contains several postai ZIP codes and you need to determine how many unique ZIP codes there are in the file. Which of the following commands can be used for that purpose?
sort	zips.txt uniq -c
uniq	zips.txt
coun	t zips.txt
cat z	ips.txt uniq -c
13.	You need to examine the seventh section of the manual page for regular expressions, or regex, on a Linux system. Which command displays the seventh section of the manual?
man	regex -7
man	regex 7
man	-page 7 regex
man	7 regex
14.	What command is used to bring a command to foreground Processing after it has been backgrounded with an &?
bg	
fore	
4g	
fg	
15.	You are debugging a configuration file and the daemon indicates there is a problem on line 932. Which of the following commands will prepend line numbers onto the file?
lines	
wc -l	
newl	ine
nl	

11. What option is used to change the number of lines of output for the head

16. You would like to tail a log file to watch entries as they are being added to the log file. In addition, you would also like to work within the same terminal window or SSH (Secure Shell) session to add entries to another file at the same time. Which command can be used to create two sessions within the same terminal window?

screen

tmux	
sess	
terms	se
17.	Users are reporting that various programs are crashing on the server. By examining logs, you see that certain processes are reporting out-of-memory conditions. Which command can you use to see the overall memory usage, including available swap space?
tree	
pgrep	
uptin	ne
free	
18.	Which command will find directories with names beginning with 2014 located beneath the current directory?
find .	/ -name "2014"
find .	/ -type d -name "2014"
$find_{j}$	/ -type d "2014"
find .	/ -type d -name "2014*"
19.	Which option to both mv and cp will cause the command to prompt before overwriting files that already exist?
\mathbf{f}	
\mathbf{z}	
r	
i	
20.	Which of the following commands shows the currently running processes and their resource usage in real time, updated every few seconds?
nice	
ps	
top	

procs

21. You need to write a script that gathers all of the process IDs for all instances of Apache running on the system. Which of the following commands will accomplish this task?

ps auwx | grep apache
pgrep apache
processlist apache
Is -p apache

22. You are attempting to find more information about the jobscommand; however, an Internet search was not particularly helpful because there are so many Linux-related jobs available. Additionally, you attempted to view the man page for the jobscommand but it was not available. Which man page should you use to view more information on jobs?

jbs procetl bash ps

23. You are using pgrep to find the process IDs for a given command. However, several other commands seem to also appear. Which option to pgrep enables matching against the full path of the process?

-f -d

-о -і

24. Which of the following commands uses 128-bit message digests?

sha256sum

sha512sum

sh128sum

md5sum

25. The current hierarchy on the server contains a directory called /usr/local. You need to create additional directories below that are called /usr/local/test/october. Which command will accomplish this task?

mkdir -p /usr/local/test/october mkdir /usr/local/test/october

```
mkdir - f /usr/local/test/october
  26. You are working with the j obs built-in command to display jobs. You
     would like to see only running jobs. Which option to the jobs built-in
     command will display only running jobs?
-S
-a
-1
-r
  27. You receive a file with an . lzma extension. Which command can you use
      to decompress this file?
XZ
lz
gz
bzip
  28. Which option to the bunzip2 command sends output to STDOUT, much
     like the bzcat command?
-S
-0
-c
-d
  29. You need to determine files that are sized above 1GB. Which of the following
     commands accomplishes this task?
find / -size +1G
find / -size 10000M
find / +1M
find / -size +1B
  30. You have been asked to create a compressed file that will be readable
     by those with other operating systems. Which tool can you use for this
     purpose?
gzip
bzip2
XZ
```

mkdir -r /usr/local/test/october

tar

31.	You are using the Vi editor for changing a file and need to exit. You receive
	a notice indicating "No write since last change". Assuming you want to
	save your work, which of the following commands will save your work and
	exit Vi?

:wq

:q!

dd

X

32. Which signal is used by default by the pkill command?

SIGKILL

SIGTERM

SIGHUP

SIGKS

33. Which of the following pagers includes the ability to search backward and forward as well as move backward and forward, line-by-line, and page-by-page?

more

back

less

catch

34. Which type of quotes are used so that variables are interpolated within a Bash shell script?

Escaped quotes

Single quotes

Double quotes

Side quotes

35. You are attempting to use rmdir to remove a directory, but there are still multiple files and other directories contained within it. Assuming that you're sure you want to remove the directory and all of its contents, what is the command and arguments to remove the directory and all of its contents?

rm - f

rm -rf

```
rmdir -a
rmdir -m
  36. Which of the following commands searches each user's .bash history file
     to determine whether the user has invoked the sudo command?
find /home -name "bash_history" | grep sudo
find /home -name ".bash history" | xargs grep sudo
find /home/.bash_history | xargs grep sudo
find /home -type history | xargs grep sudo
  37. The fgrep command is equivalent to running the grep command with which
      option?
-f
-F
-a
-E
  38. You are creating a Bash shell script and need to output the current
     script name to the current terminal. Which of the following commands
      accomplishes this task?
cat
echo $0
echo $SCRIPT
echo $PS1
  39. You have several files that need to be combined, with a line from each file
     being appended onto a single line. Which command can be used for this
     purpose?
paste
comb
appfile
combo
  40. You need to match files that begin with 201, as in 2017, 2018, 2019. Which
      of the following wildcard specifications can be used?
201?
201$
201@
```

201]

41. Which of the following will unzip and extract the contents of a file that has been tarred and gzipped?

```
tar -zxf <file.tgz>
tar -xf <file.tgz>
tar -vz <file.tgz>
tar -fd <file.tgz>
```

42. When examining the output from top, you see that a process has a value in the PR column of 20. To what does the PR column refer?

The process ID

The process utilization

The process priority

The processor core on which the process is executing

43. Which command will watch the Apache log at /var/log/httpd/access. log and continually scroll as new log entries are created?

```
watch \ /var/log/httpd/access.log
```

tail /var/log/httpd/access.log

tail -f /var/log/httpd/access.log

mon /var/log/httpd/access.log

44. Which environment variable is used to control the default text editor used on a Linux system?

EDITOR

EDIT

TEXTEDITOR

DEFAULT EDITOR

45. Which of the following commands reprioritizes an already running process?

nice

renice

chnice

altnice

46. Which of the following commands will provide the usernames in a sorted list gathered from the /etc/passwd file?

```
cat /etc/passwd | awk -F : '{print $1}' | sort
sort /etc/passwd | cut
echo /etc/passwd
cat /etc/passwd | awk '{print $1}' | sort
 47. You need to break a large file into smaller pieces. Which command can be
     used for this purpose?
cut
split
dice
rem
 48. You need to kill several processes at once. Rather than writing a complex
     ps-based command to do so, you can use which other command?
pkill
psk
pskill
prock
 49. You need to run a command that is not inside your current path. Which
     of the following represents the typical method for doing so?
Use a fully qualified path for the command.
Set the PATH environment variable to include the correct path.
Restart the shell environment.
Restart the computer for settings to take effect.
 50. Which options to xz are functionally equivalent to the xzcat program?
decompress and output
output and format
decompress and stdout
stdout and format
 51. You have received a file that does not have a file extension. Which command
     can you run to help determine what type of file it might be?
grep
telnet
file
```

export

manual

52. Assume that you re using the Bash shell and want to prevent output redirects from accidentally overwriting existing files. Which command and option can be used to invoke this behavior?

```
setoutput -f
overwrite=no
overwrite -n
set -C
 53. Which of the following commands will send the contents of /etc/passwd to
     both STDOUT and to a file called passwordfile?
cat /etc/passwd > passwordfile
var /etc/passwd | passwordfile
cat /etc/passwd | tee passwordfile
echo /etc/passwd | stdout > passwordfile
 54. What is the default number of lines printed by the head and tail commands,
     respectively?
10 for head, 5 for tail
5 for head, 10 for tail
10 for both head and tail
3 for both head and tail
 55. Which command is used in order to decompress a file that has been
     compressed with xz?
unxz
dexz
xzu
u2xz
 56. Which command is used to access documentation on the Linux computer
     for a given command?
doc heredoc
man
```

57.	An environment variable has been set on login, but you need to remove that variable temporarily for the current session. Which shell built-in command can be used for this purpose?
reset	
unset	
undo	
clear	
58.	Which option to the cp command will copy directories in a recursive manner?
-v	
-R	
-z	
-i	
59.	Which of the following commands will display the last 50 lines of your command history when using Bash, including commands from the current session?
bashl	nist 50
histor	ry 50
cat .	pash_history
tail -	f.bash_history
60.	Which option to sha256sum causes the file to be read in binary mode?
-i	
-b	
-c	
-p	
61.	You're working with a large file in Vi and need to search for instances of a string earlier in the file. Which key will search backward in the file?
/	
h	
?	
X	
62.	You need to cut or remove eight lines from a file while editing with Vi. Which combination should be used for this purpose?

d7	
d8	
r8	
x7	
63.	You need to remove a single file from a directory if it exists but would like to be prompted for confirmation before doing so. Which option to the rm command causes the command to prompt for confirmation?
-a	
-е	
-i	
-O	
64.	You have attempted to stop a process using its service command and also using the kill command. Which signal can be sent to the process using the kill command in order to force the process to end?
-15	
-f	
-9	
-stop	
65.	Which command prints your current directory?
cwd	
dir	
cd	
pwd	
66.	Which of the following commands will print various information about the kernel and architecture, along with other details?
info -	sys
man	sys
sysin	fo
unan	ne -a
67.	Which of the following command lines would monitor a single process called nagios in a continuous manner?

top -n 1
top -p 23
ps -nagios
top -p 'pidof nagios'
68. You cannot find the man page of a command but you know the command exists. For example, the alias command exists but there is no man page for it. Which of the following commands could you execute to determine what type of command alias is?
type
cmd
uses
listr
69. When using sed for a substitution operation, which option must be included so that the substitution applies to the entire line rather than just the first instance?
g
a
\mathbf{r}
y
70. Which option for the wc command prints the number of lines given as input?
-f
-a
-1
-0
71. When using Bash, how would you execute the last command starting with a certain string, even if that command was not the last one that you typed?
Precede the command with! and then the string to search for.

72. You have a specialized need for outputting a file in octal format. Which command or series of commands can be used for this purpose?

Precede the command with a ? and then the string to search for.

Search for the command in history.

This is not possible with Bash.

```
oct
cat | octalf
od
octf
 73. Which find command will locate files within the current directory that
     have been modified within the last 24 hours?
find ./ -type f -mtime 0
find ./ -type f -mtime 24
find \cdot -type f -mtime +1
find ./ type -f time 24
 74. You have backgrounded several tasks using &. Which command can be
     used to view the current list of running tasks that have been backgrounded?
procs
plist
jobs
free
 75. You need to determine the exact command that will be run based on your
     current environment settings. Which command is used for this purpose?
what
which
find
Is
 76. Which command will move all files with a .txt extension to the /tmp
     directory?
mv txt* tmp
move *txt /temp
mv *.txt /tmp
mv *.txt tmp
 77. You need to start a process that cannot be sent or will not accept aSIGHUP
     signal. Which command should be used to start the process?
nosig
nohup
```

```
nokill
noproc
  78. Which command can be used to determine the current load average along
     with information on the amount of time since the last boot of the system?
uptime
sysinfo
bash
Is -u
  79. You have downloaded a file with a . gz extension. What is the most likely
     command that you will use to decompress this file?
unz
gunzip
hunzip
gzunzip
  80. When editing with Vi, which command changes to insert mode and opens
     a new line below the current cursor location?
f
a
O
i
  81. Which of the following egrep commands will examine /etc/passwd to
      find users who are using either /bin/bash or /usr/bin/zsh for their shell
     environment?
grep sh /etc/passwd
egrep '/*/.sh$' /etc/passwd
grep '/*/.=sh$' /etc/passwd
egrep '/*/..?sh$' /etc/passwd
  82. Which kill signal can be sent in order to restart a process?
-HUP
-RESTART
-9
-SIG
```

83. Which options to is will produce output, including hidden (dot) files, in a list that is ordered such that the newest files are at the end of the output
-la
-lat
-latr
-itr
84. What is the default delimiter used by the cut command?
Colon
Tab
Space
Comma
85. Which option to cpio lists the files as it is operating on them?
-1
-v
-k
-s
86. You need to run a command periodically and examine its output in reatime. Which of the following commands enables this scenario?
mon
procmon
pgrep
watch
87. When working in the Bash shell, you need to redirect both STDOUT and STDERR. Which of the following commands will redirect both STDOUT and STDERR?
1>2
2
2>&1
88. Which option to the man command accesses a different level of documentation, for example, system call documentation?

$\mathrm{man}\ 2$

progman

man -sys

 \max -list sys

Answers

- 1. B
- 2. C
- 3. C
- 4. B
- 5. B
- 6. D
- 7. A
- 8. B
- 9. D
- 10. A
- 11. D
- . . .
- 12. A13. D
- 14. D
- 15. D
- 16. A
- 17. D
- 18. D
- 19. D
- 20. C
- 21. B
- 22. C
- 23. A
- 24. D
- 25. A
- 26. D

- 27. A
- 28. C
- 29. A
- 30. A
- 31. A
- 32. B
- 33. C
- 34. C
- 35. B
- 36. B
- 37. B
- 38. B
- 39. A
- 40. A
- 41. A
- 42. C
- 43. C
- 44. A
- 45. B
- 46. A
- 47. B
- 48. A
- 49. A
- 50. C
- 51. C
- 52. D
- 53. C
- 54. C
- 55. A
- 56. C
- 57. B

- 58. B
- 59. B
- 60. B
- 61. C
- 62. A
- 63. C
- 64. C
- 65. D
- 66. D
- 67. D
- 68. A
- 69. A
- 70. C
- 71. A
- 72. C
- 73. A
- 74. C 75. C
- 76. C
- 77. B
- 78. A
- 79. B
- 80. C
- 81. D
- 82. A
- 83. C
- 84. B
- 85. B
- 86. D
- 87. C
- 88. A

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