Practice Sheet

1) root user UID is 0
Answer: T

2) System users UID starts from 1000
Answer: F

3) `touch` program is used to create or update one or more file at once
Answer: T

4) `mkdir` program is used to create one or more directories at once
Answer: T

5) `tail -n [FILE]` is used to output last n-lines in a file
Answer: T

6) A Compressed file is a collection of files and directories that are stored in one file and stored in a way that uses less space
Answer: T

7) `tar` program generate compressed archives with gzip and bzip2
Answer: T

8) Linux is a Open-Source kernel
Answer: T

9) The shell is a program that runs inside a terminal
Answer: T

10) Richard Stallman is the creator of the linux kernel
Answer: F

11) drwxr-xr--' Permission attributes correspond to Owner, Group and Everybody else respectively
Answer: T

12) rwx' corresponds to read, write, examine
Answer: F

13) User, Group and Others are types of file ownership
Answer: T

14) User groups are groups that can contain multiple users and all users belonging to a group will not have the same Linux group permissions
Answer: F

15) `chmod -x` is an example of symbolic mode
Answer: T

16) `chgrp` program is used to change the owner and the group to which a file or directory belongs to
Answer: F

17) `id` is used to find the id of a running process
Answer: F

18) The three types of owners in Linux are user, group, admin.
Answer: F

19) In symbolic mode of `chmod` command we use `=` to remove permissions.
Answer: F

20) `chown` can change both the owner and the group that the file belongs to.
Answer: T

21) System user is the administrator of the system with unlimited access to all its resources.
Answer: F

22) A user can have more than one primary group.
Answer: F

23) Information about users on the system are stored in `/etc/shadow` file.
Answer: F

24) Information about users on the system are stored in `/etc/shadow` file.
Answer: F

25) Information about user authentication is stored in `/etc/shadow` file.
Answer: T

26) We create users in Linux using the `usercreate` command.
Answer: F

27) `passwd` command prints out the user's password.
Answer: F

28) We delete users using `userdel` command.
Answer: T

29) We add users to groups using `groupmod` command.
Answer: F

30) `useradd` command is used to create new users
Answer: T

31) A package is usually referred to as an application, it can be a GUI, command line tool, etc...
Answer: T

32) Packages contain binaries or the executable programs only
Answer: F

33) Packages contain configuration files, documentation and manuals
Answer: T

34) Each package must have at least 1 dependency
Answer: F

35) Packages can not have more than 2 dependency
Answer: F

36) Package repositories are places where packages are stored and easily retrievable by package managers
Answer: T

37) A package manager is a tool that allows users to install, remove, upgrade, configure, query and manage software packers on an operating system
Answer: T

38) Package managers are CLI only
Answer: F

39) `pacman` is the default package manager for Ubuntu and Pop_OS.
Answer: F

40) To install packages on Ubuntu or Pop_OS we use `sudo dnf install`.
Answer: F

41) Packages can work without their dependencies installed.
Answer: F

42) Package managers handle missing dependencies and installs them automatically.
Answer: T

43) A parent process is a process that creates another process(es), directly or indirectly
Answer: T

44) A child process is a process that is created by another process
Answer: T

45) An orphan process is a process that has lost its parent
Answer: T

46) A zombie process is a process that has completed execution but still has an entry in the processes table
Answer: T

47) There are fundamentally two types of processes in Linux: Foreground (interactive) process and background (non-interactive) process
Answer: T

48) A signal is a notification to a process that something has happened
Answer: T

49) A process can send a signal to another process
Answer: T

50) Each signal has a name only
Answer: F

51) `kill` command is used to send a signal to a process
Answer: T

52) The default signal sent by `killall` is `SIGTERM`.
Answer: T

53) `echo hello > text.txt` will append 'hello' string to 'text.txt'
Answer: F

54) Pipeline '|' is use to the output of a command and pass it as input for the following command
Answer: T

55) The scripts help us to automate our tasks to be easier and faster
Answer: T

56) A bash is a compiler
Answer: F

57) using a variable (or expansion) is like #varname
Answer: F

58) writing comments is like #comment
Answer: T

59) Including an interpreter is like #$path_to_interpreter
Answer: F

60) Only root user and users with sudo privileges can edit `/etc/shadow` and `/etc/passwd` file.
Answer: T

61) The `su` command grants super user access.
Answer: F

62) Any user can use the `sudo` command.
Answer: F

63) The root user can switch to any user without needing its password.
Answer: T

64) Vim is a modal text editor
Answer: T

65) ;' Repeat the last search in the same line using opposite direction
Answer: F

66) .' is used to repeat last command
Answer: T

67) p' in normal mode is used to paste clipboard
Answer: T

68) u' in normal mode is used to undo
Answer: T

69) A' in normal mode to append text at the end of line
Answer: T

70) Symbol (Soft) links are denoted by 'l' in ls output
Answer: T

71) `gunzip` and `bunzip2` require compressed files to have '.gz' or '.bz2' suffix while `tar` does not
Answer: T

72) `tar -fc my_archive.tar file`.txt file2.txt` is used to create an archive
Answer: F

73) Hard links is the same as a copy
Answer: F

74) Moving hard link across different file systems could corrupt the link
Answer: T

75) /etc/passwd' stores users' encrypted password hashes
Answer: F

76) /etc/passwd' stores users' preferred shell
Answer: T

77) `su -` command lets you switch user while keeping your environment variables
Answer: F

78) A process is free to ignore sent signals with some exceptions
Answer: T

79) SIGTERM' can be ignored unlike `SIGKILL` which can not be ignored
Answer: T

80) The default signal sent by `kill` is `SIGKILL`.
Answer: F

81) doing command substitution is by ' '
Answer: F

82) Regular files are denoted by '-' in ls output
Answer: T

83) Directories are denoted by 'd' in ls output
Answer: T

84) `gzip -S` is used to list compression statistics'
Answer: F

85) `locate my_files` requires 'my_fiile' to be created before last database update
Answer: T

86) `rm ./images/` will delete 'images' directory. (Assume that the directory exists)
Answer: F

87) All absolute paths must begin with a leading forward slash '/'
Answer: T

88) Hard links are considered like `Shortcuts` in Windows
Answer: F

89) Hard links point to the same inode structure while Symbolic (Soft) links do not
Answer: T

90) Renaming, deleting or moving source in a Symbolic (Soft) link could corrupt the link
Answer: T

91) Renaming, deleting or moving source in a Hard link could corrupt the link
Answer: F

92) Dangling or broken Symbolic (Soft) link is a link that points to a non-existing source
Answer: T

93) `chown` program is used to change the owner of a file or directory only
Answer: F

94) -rw-r--r-- 1 john john 69K Aug 2 15:20 report.pdf'
Can Kevin write to 'report.pdf' ?
Answer: F

95) More than one primary group exist for a given user
Answer: F

96) `chmod 761 newFile` this command gives the group permission to read and write only.
Answer: T

97) /etc/passwd', '/etc/shadow' and '/etc/group' files are essential to linux
Answer: T

98) Shared libraries are considered a type of packages dependencies
Answer: T

99) Package repositories can be local to a system
Answer: T

100) Package managers create local cache of metadata on your system
Answer: T

101) Package managers manages the installation and removal of dependencies
Answer: T

102) To upgrade packages on the system in Ubuntu and Pop_OS we use `sudo apt update`.
Answer: F

103) A zombie process is a process that has completed execution but its parent process has not yet
retrieved its exit status
Answer: T

104) `ps` command is used to display information about the currently running processes
Answer: T

105) SIGTERM' is used to terminate a process forcefully
Answer: F

106) `kill firefox` is used to terminate firefox
Answer: F

107) `tee` program is used to output to a file and stdout at the sametime
Answer: T

108) varname = 5
echo $vaname
this code will print 5
Answer: F

109) ``
Answer: F

110) <Ctrl-u>' in normal mode is used to redo
Answer: F

111) root user UID is ...
a) 0   b) 1   c) -1   d) None of the previous
Answer: 0

112) Regular users UID starts from ...
a) 1000   b) 999   c) 0   d) 1
Answer: 1000

113) John wants to go to his home directory. Which of the following commands will help John reach his destination ?
a) cd ~   b) cd ..   c) cd   d) A and C
Answer: A and C

114) Which of the following commands is used to list the content of a directory in long listing format ?
a) pwd   b) ls   c) cat   d) ls -l
Answer: ls -l

115) Which command should you use to display the last 11 lines of a file ?
a) head 11 my_file   b) tail 11 my_file   c) tail -n 11 my_file   d) head -n 11 my_file
Answer: tail -n 11 my_file

116) Mark wants to backup his `Work` directory but he does not know how, Can you guide him ?
a) tar -czf work_backup.tar.gz Work   b) tar -xf work_backup.tar.gz Work   c) tar -xf Work   d) gzip Work
Answer: tar -czf work_backup.tar.gz Work

117) Mark wants to find out his UID and GID(s). Can you help him ?
a) id   b) grp   c) ps   d) uid -l
Answer: id

118) Which of the following is/are considered (a) package(s) ?
a) Kernel   b) Firefox   c) neofetch   d) B and C
Answer: B and C

119) Which of the following is/are considered contents of a package ?
a) Binaries   b) metadata   c) configuration files   d) All the previous
Answer: All the previous

120) Which of the following is/are function(s) of package managers ?
a) resolve dependencies   b) Verify the integrity of the packages   c) Verify architecture compatibility   d) All the previous
Answer: All the previous

121) Mark wants to view all the running background process. Which command should he run ?
a) bg -l   b) jobs   c) ls -l   d) None of the previous
Answer: jobs

122) How can you list all available signals ?
a) pkill   b) killall -l   c) kill -l   d) B and C
Answer: B and C

123) Which symbol should you use to redirect the standard output to a file (appending to the file) ?
a) 2>   b) &   c) >   d) >>
Answer: >>

124) Which symbol should you use to redirect the standard output to a file (overwrite the file) ?
a) 2>   b) &   c) >   d) >>
Answer: >

125) How to make loops (all is correct except...)?
Answer: do while

126) How to present positional parameters?
a) &n   b) #n   c) $n   d) -n
Answer: @n

127) Before running any script...
a) include the interpreter   b) making a cup of coffee   c) printing some words   d) changing the mode of the file
Answer: changing the mode of the file

128) Which of the following quits vim while discarding any changes ?
a) :wq   b) :q   c) :q!   d) :wqa
Answer: :q!

129) Which of the following commands is used to list opened buffers ?
a) :bd   b) :ls   c) :buffer list   d) :bp
Answer: :ls

130) Kevin has mistakenly changed his working directory and now he wants to return to his previous working directory.
How would you help him ?
a) cd ~   b) cd .   c) cd ^   d) cd -
Answer: cd -

131) John wants to create a backup of his home directory. Can you help him ?
a) cp ~/ john_backup   b) cp -r ~/ john_backup   c) cp -v ~/ john_backup   d) None of the previous
Answer: cp -r ~/ john_backup

132) Mark wants to read 3 files simultaneously. Can you help him ?
a) tail file1 file2 file3   b) cat file1 file2 file3 | less   c) head file1 file2 file3   d) All the previous
Answer: cat file1 file2 file3 | less

133) David wants to write some text to a file. Which of the following program(s) can help him ?
a) echo   b) nano   c) vim   d) All the previous
Answer: All the previous

134) Which of the following are contained in inode structures ?
a) File Size   b) Creation, Read and Write timestamps   c) User and group IDs associated with the file
d) All the previous
Answer: All the previous

135) Which of the following components does '/etc/passwd' file store ?
a) User's shell   b) User's home directory   c) User UID   d) All the previous
Answer: All the previous

136) What does '/sbin/nologin' in '/etc/passwd' mean ?
a) Do not prompt for password on login (Autologin)   b) Interactive logins are not allowed   c) Do not
prompt for sudo password   d) None of the previous
Answer: Interactive logins are not allowed

137) Which of the following components does '/etc/group' file store ?
a) Group Name   b) Group ID   c) Group List   d) All the previous
Answer: All the previous

138) `ps` command provides information such as
a) user ID   b) CPU usage   c) parent process ID   d) All the previous
Answer: All the previous

139) Job   Group CPU   State   Command
 3   94101   23%   running   code &'
How can you bring `vscode` to foreground ?
a) fg $3   b) fg &3   c) fg %3   d) None of the previous
Answer: fg %3

140) David wants to redirect the stderr to a file. Which form of redirection should he use ?
a) < log_err.txt   b) > log_err.txt   c) >> log_err.txt   d) 2> log_err.txt
Answer: 2> log_err.txt

141) Which of the following commands is used to auto indent line
a) >>   b) <<   c) ==   d) =iw
Answer: ==

142) Kevin wants you to create 2 directories with the following paths:
`./parent/`
`./parent/child_1/`
`./parent/child_1/child_2/`
How would you accomplish this task ?
a) mkdir ./parent/child_1/child_2   b) mkdir -p ./parent/child_1/child_2   c) mkdir ./parent ./parent/child_1 ./parent/child_2   d) rmdir `./parent/child_1/child_2`
Answer: mkdir -p ./parent/child_1/child_2

143) You want to rename a badly named file `Program Entry.c` to 'program_entry.c`. Which command should you run ?
a) mv 'Program Entry.c' program_entry.c   b) mv Program\ Entry.c program_entry.c   c) mv Program Entry.c program_entry.c   d) A and B
Answer: A and B

144) Mark's memory is not what it used to be and he forgot how to list inode number of a file. Can you refresh Mark's memory ?
a) whatis ls   b) ls --help   c) man ls   d) B and C
Answer: B and C

145) You are given an extensionless file and want to find out the file type. Which command should you use to find out ?
a) file   b) type   c) ls   d) None of the previous
Answer: file

146) You are a system administrator and want to output the last 20 lines in a log file. Which command should you run ?
a) head -10   b) tail -20   c) less   d) None of the previous
Answer: tail -20

147) Thomas wants to create a shortcut to his work `~/Work~ folder on his desktop, How can he achieve this on Linux ?
a) ln -s /home/Thomas/Work /home/Thomas/Desktop/WorkShortcut   b) ln /home/Thomas/Work /home/Thomas/Desktop/WorkShortcut   c) ln /home/Thomas/Desktop/WorkShortcut /home/Thomas/Work   d) ln -s /home/Thomas/Desktop/WorkShortcut /home/Thomas/Work
Answer: A

148) David wants to delete a link. Which of the following program(s) can help him ?
a) unlink   b) rm   c) ln   d) A and B
Answer: A and B

149) Which of the following is/are (a) type(s) of users groups ?
a) complimentary   b) primary   c) supplementary   d) B and C
Answer: B and C

150) Which of the following is the type of user groups that is created when a new user is created on a given system and is the default group that files created by the user belongs to ?
a) supplementary   b) complimentary   c) primary   d) A and C
Answer: primary

151) You work as a Linux system administrator. You want to find if the user 'kevin' belongs to IT group 'it'. Which command should you run ?
a) group kevin   b) groups kevin   c) grp kevin   d) grps kevin
Answer: groups kevin

152) Mark wants to switch to root user but he does not know how, so he came to you for advice. Can you help him ?
a) su   b) sudo su   c) chusr root   d) chusr root
Answer: sudo su

153) You work as a Linux system administrator. You are given the following ticket:

From: johncahill@innersys.com
Subject: Locked out of my system

Hey I forgot my login password, Can you SSH and restore it to company's default password ?

Thanks in advance.
John Cahill
a) passwd   b) sudo passwd john   c) sudo password john   d) passwd john
Answer: sudo passwd john

154) You work as a Linux system administrator. You are tasked with removing Mark's user 'mark' including his home directory as it is no longer need. How can you achieve this task ?
a) sudo userdel mark   b) sudo userdell -r mark   c) userdel mark   d) sudo userdel -r mark
Answer: sudo userdel -r mark

155) all of the coming is correct about how to do operations and assign them to a variable except...?
a) varname=1+2   b) varname=$((1+2))   c) let varname=1+2   d) varname=`expr 1+2`
Answer: varname=1+2

156) How to take input from the user (all is correct except...)?
a) read -p "Enter your name: " name   b) get name   c) read name   d) echo "Your name is $1"
Answer: get name

157) Which of the following commands is used to Copy line ?
a) y0   b) c$ c) yy   d) y^
Answer: yy

158) Which of the following is/are considered (a) text object(s) ?
a) w   b) p   c) <   d) All the previous
Answer: All the previous

159) Which of the following is/are considered (a) type(s) of visual mode ?
a) Character-wise   b) Line-wise   c) Block-wise   d) All the previous
Answer: All the previous