

Question 1Skipped

Which of the following programs on a Linux system could you use instead of Windows Media Player?

Correct answer

VLC

QuickTime

iTunes

Winamp

Overall explanation

OBJ-1.2: VLC is a media player made by the VideoLAN project. It is cross-platform and works great on Linux systems to play all types of video and music files. The other options provided only work on Mac OS X or Windows systems.

Domain

1 - Linux Community and Career

Question 2Skipped

Which keyboard shortcut allows copying highlighted text while working in the command line terminal?

CTRL + C

Correct answer

CTRL + SHIFT + C

CTRL + ALT + C

CTRL + TAB + C

Overall explanation

OBJ-1.4: Holding down the CTRL and SHIFT keys and pressing C allows any highlighted text in the terminal to be copied. Pressing CTRL + C within the terminal is recognized as a command interrupt.

Domain

1 - Linux Community and Career

Question 3Skipped

Which command line can be used to search help files that mention the word 'copy'?

help copy

man copy

Correct answer

man -k copy

info copy

Overall explanation

OBJ-2.2: The -k option of the man command is equivalent to the apropos command. It searches the short manual page descriptions for keywords and displays any matches.

Domain

2 - Linux System

Question 4Skipped

Which of the following commands will create a single directory named dir1 dir2?

mkdir dir1dir2

Correct answer

mkdir "dir1 dir2"

make dir1/dir2

create directory2

Overall explanation

OBJ-2.1: A space in the directory name can be used by enclosing the directory name within quotes (mkdir "dir1 dir2"). The above command will create a single directory named dir1 dir2 (with a space between dir1 and dir2).

Domain

2 - Linux System

Question 5Skipped

You have just created a text file with a secret password in it called password.txt. You want to ensure that the password is not seen when the ls command is run within the current directory. What command should you use to ensure the text file is hidden from the filesystem?

rn password.txt .password.txt

mv password.txt password.hidden

Correct answer

mv password.txt .password.txt

rn password.txt password.hidden

Overall explanation

OBJ-2.3: To hide a file in the Linux filesystem, simply rename it with a prefixed dot (.) to its filename. Therefore, mv password.txt .password.txt will cause the file password.txt to be renamed as a "dot" file and become hidden from the ls command.

Domain

2 - Linux System

Question 6Skipped

Your current present working directory is /home/jason/documents/. You just entered cd . into the command line and then enter pwd. What output do you receive?

Correct answer

/home/jason/documents/

/home/jason

/home

/home/jason/documents/..

Overall explanation

OBJ-2.3: The . is a special directory reference to the current present working directory. Using cd . essentially does nothing since you are asking the system to change from the pwd to the pwd. Therefore, you will get /home/jason/documents.

Domain

2 - Linux System

Question 7Skipped

Which command can be used to search help files that mention the word “copy”?

whatis copy

Correct answer

man -k copy

man copy

copy help

Overall explanation

OBJ-2.2: The command “man -k <keyword>” will search for the keyword in all of the man pages and return any results it finds. This is an easy way to find which command to use for a certain action if you cannot remember a command’s name or syntax.

Domain

2 - Linux System

Question 8Skipped

Which of the following commands will output all of the lines with the name Fred in upper or lower case but not the word red from the file data_file?

Correct answer

grep '[Ff]red' data_file

grep -v fred data_file

grep '[f]red' data_file

egrep fred data_file

Overall explanation

OBJ-2.1: The command “grep ‘[Ff]red’ data_file will display all occurrences of Fred and fred from the data_file. The options with “fred” will only display the lowercase version, and so will the one with “[f]red”.

Domain

2 - Linux System

Question 9Skipped

What must the user do to run a program that is not within a directory located in the PATH variable?

create a script

create a new path

re-install the program

Correct answer

include the file path to the program

Overall explanation

OBJ-2.2: To run a program that is not within a directory located in the PATH variable, the user must include the file path to the program.

Domain

2 - Linux System

Question 10Skipped

What command would a user enter to delete a directory containing no other files or directories within it?

mkdir

Correct answer

rmdir

cpdir

mvdir

Overall explanation

OBJ-2.4: The rmdir command removes each directory specified on the command line if they are empty. Each directory removed must contain no files or directories, or it cannot be removed by rmdir.

Domain

2 - Linux System

Question 11Skipped

When using a web browser, what should a user do to prevent private data from being stored locally?

There is no way to achieve that because Linux always logs network data

Correct answer

Browsers can be configured to use a private mode that does not store any data locally

Delete the profile directory in the home directory and create a new one after the work is done

Use the secure versions of the web browser

Overall explanation

OBJ-1.4: Private browsing (alternatively referred to as InPrivate Browsing, private window, or Incognito mode) is an Internet browser setting that prevents browsing history from being stored locally.

Domain

1 - Linux Community and Career

Question 12Skipped

Which of the following is NOT a heightened value proposition of Open Source Software compared to Proprietary Software?

Security

Correct answer

Popularity

Interoperability

Localization

Overall explanation

OBJ-1.3: The heightened value proposition from open source compared to most proprietary formats include security, affordability, transparency, interoperability, scalability, and localization.

Domain

1 - Linux Community and Career

Question 13Skipped

What is the practice of offering people the right to freely distribute copies and modified versions of a work with the stipulation that the same rights be preserved in derivative works created later called?

Correct answer

Copyleft

Copyright

Openwrite

OpenCopy

Overall explanation

OBJ-1.3: Copyleft, distinguished from copyright, is the practice of offering people the right to freely distribute copies and modified versions of a work with the stipulation that the same rights be preserved in derivative works created later. Copyleft software licenses are considered protective or reciprocal, as contrasted with permissive free-software licenses.

Domain

1 - Linux Community and Career

Question 14Skipped

What is the main difference between Linux and Windows/MAC OS?

There is no real difference

Correct answer

Linux is open source software while the other two are closed source operating systems

Linux is affordable while Windows/MAC OS is expensive

You have to install Linux while Windows/MAC OS is pre-installed

Overall explanation

OBJ-1.1: Unlike either Windows or macOS, Linux is an open-source operating system, originally developed by Linus Torvalds back in 1991. Because it's open-source, it can be modified and extended by anyone.

Domain

1 - Linux Community and Career

Question 15Skipped

What is defined by a Free Software license?

The programming languages which may be used to extend the licensed program

A complete list of libraries required to compile the licensed software

Limits on the purposes for which the licensed software may be used

Correct answer

The conditions for modifying and distributing the licensed software

Overall explanation

OBJ-1.3: A free software license is a notice that grants the recipient of a piece of software extensive rights to modify and redistribute that software.

Domain

1 - Linux Community and Career

Question 16Skipped

Which of the following commands can search for executable programs or scripts located in the PATH variable?

what

why

Correct answer

which

how

Overall explanation

OBJ-2.2: Using the command which, as in "which ls", the PATH variable is searched and starting at the first directory found in the PATH, will look for the command ls. If it is not found, the next directory is searched, and so on.

Domain

2 - Linux System

Question 17Skipped

Which of the following directories contain all of the installed kernels on your system and their needed drivers?

Correct answer

/boot

/proc

/sys

/dev

Overall explanation

OBJ-4.3: The /boot directory contains the kernel, its associated files, and its needed drivers to boot up the operating system during the startup process.

Domain

4 - Linux Operating System

Question 18Skipped

Which version of Linux should be installed on a system with a 64-bit processor?

x32

Correct answer

x64

x86

x99

Overall explanation

OBJ-4.2: A 64-bit processor can support a 64-bit (x64) or 32-bit (x86) operating system. You should install a 64-bit operating system to ensure you can have more memory since 32-bit operating systems are limited to only 4 GB of memory.

Domain

4 - Linux Operating System

Question 19Skipped

Which of the following information can be displayed by top?

Correct answer

Running processes, ordered by CPU or RAM consumption

User accounts, ordered by the number of logins

User groups, ordered by the number of members

CPU cores, user groups, free storage

Overall explanation

OBJ-4.3: The top command displays processor activity and also displays tasks managed by the kernel in real-time.

Domain

4 - Linux Operating System

Question 20Skipped

Which of the following would properly identify the device associated with the second partition on the first hard disk on the first IDE controller of a system?

Correct answer

/dev/hda2

/dev/hd1b2

/dev/hdc1d2p2

dev/hdc1a2

Overall explanation

OBJ-4.2: Partitions on these disks can range from 1 (for the first partition) to 16 (for the sixteenth partition). If you have a few ide/pata devices installed in a system, they will be hda (the first device), hdb (the second device), hdc (the third device), and so on. Each partition on that device will append a number to it, so the second partition on the first device would be /dev/hda2.

Domain

4 - Linux Operating System

Question 21Skipped

What column tells the "w" program which session is running?

STATUS

PROGRAM

Correct answer

WHAT

WHICH

Overall explanation

OBJ-4.3: The WHAT column tells the "w" program which session is currently running.

Domain

4 - Linux Operating System

Question 22Skipped

Which UID is usually used to represent the first regular user on a Linux system?

1

10

100

Correct answer

1000

Overall explanation

OBJ-5.1: Regular users on a Linux system begin at UID 1000 and increment by 1 for each additional user.

Domain

5 - Security and File Permissions

Question 23Skipped

Which command would be used to change the owner of foo1.txt from jason to administrator?

chmod

ls -la

ls -d

Correct answer

chown

Overall explanation

OBJ-5.3: The command chown, an abbreviation of change owner, is used in Linux to change the owner of file system files and directories.

Domain

5 - Security and File Permissions

Question 24Skipped

Which file on a Linux system contains the passwords for each user on the system?

/etc/passwd

Correct answer

/etc/shadow

/etc/passwd

/etc/users

Overall explanation

OBJ-5.1: The /etc/shadow file stores the actual password in an encrypted format (more like the hash of the password) for the user's account with additional properties related to the user password. Basically, it stores secure user account information. All fields are separated by a colon (:) symbol. It contains one entry per line for each user listed in /etc/passwd file.

Domain

5 - Security and File Permissions

Question 25Skipped

Which of the following is NOT contained in the /etc/passwd file?

User Identification Number (UID)

Home directory for the user

Correct answer

The password of the user's account

Default login shell

Overall explanation

OBJ-5.1: The password field is the second field in the /etc/passwd file. Due to the /etc/passwd file's low security, the password is now stored in the /etc/shadow file instead, which can only be accessed by the root user. The /etc/passwd file now contains a single * in the password field to represent to the system that the real password is stored in /etc/shadow instead.

Domain

5 - Security and File Permissions

Question 26Skipped

Which command is used to change the password of a user's account?

useradd

pwd

Correct answer

passwd

chuser

Overall explanation

OBJ-5.2: The passwd command is used to change the password of a user's account. This command runs as the root user using SUID.

Domain

5 - Security and File Permissions

Question 27Skipped

Which option can be used with useradd to specify the home directory for a user?

Correct answer

-d

-c

-b

-h

Overall explanation

OBJ-5.2: The -d option is used with useradd (useradd -d /path/to/directory username) to specify the user's home directory location instead of using the default directory.

Domain

5 - Security and File Permissions

Question 28Skipped

Where should temporary files be stored on a Linux system that can be safely deleted during a reboot?

/var/tmp

/etc/tmp

Correct answer

/tmp

/bin/tmp

Overall explanation

OBJ-5.4: /tmp is designed to be used as fast (and small) temporary storage with a short lifetime. Many Linux systems will delete the /tmp directory contents on each reboot, and many distributions will mount the directory in the RAM-disk. /var/tmp is instead normally located on a physical disk, is larger in size, and can hold temporary files for a longer time. /var/tmp is not usually automatically deleted when the system is rebooted since it is stored on the physical hard disk.

Domain

5 - Security and File Permissions

Question 29Skipped

Which version of Linux should be installed on a system with a 32-bit processor?

x32

x64

Correct answer

x86

x99

Overall explanation

OBJ-4.2: A 32-bit operating system cannot support a 64-bit operating system. Therefore, you have to install a version of Linux compiled for x86 (32-bit) processors.

Domain

4 - Linux Operating System

Question 30Skipped

Which of the following is used as a virtual or pseudo filesystem used to interface with the kernel and process?

/boot

Correct answer

/proc

/sys

/dev

Overall explanation

OBJ-4.3: The /proc tree originated in System V Unix, where it only gave information about each running process, using a /proc/\$PID/stuff scheme. Linux greatly extended that, adding all sorts of information about the running kernel's status. The intended purpose for the /proc virtual filesystem is to provide an interface into the kernel and its processes.

Domain

4 - Linux Operating System

Question 31Skipped

A Linux computer currently has no access to the internet. Which command is used to display and manipulate the information about the network gateway for the system?

gateway

Correct answer

route

ifconfig

netstat

Overall explanation

OBJ-4.4: Route command is used to show/manipulate the IP routing table. It is primarily used to set up static routes to specific hosts or networks via an interface.

Domain

4 - Linux Operating System

Question 32Skipped

Which of the following commands would be used to display the value of the HOME variable to the terminal's display?

echo HOME

Correct answer

echo \$HOME

echo &HOME

echo "HOME"

Overall explanation

OBJ-3.3: To display the contents of a variable to the terminal's display, the command syntax is `echo $VARIABLE`, where `VARIABLE` is the variable's name.

Domain

3 - Power of Command Line

Question 33Skipped

Which redirection operator accepts text on the following lines as standard input?

<>

>>

Correct answer

<<

><

Overall explanation

OBJ-3.2: The << redirection operator is used to accept text on the following lines as standard input.

Domain

3 - Power of Command Line

Question 34Skipped

Which command is used to print the full contents of a file to the screen at once?

Correct answer

cat

tail

head

less

Overall explanation

OBJ-3.2: The `cat` (short for “concatenate”) command is one of the most frequently used commands in Linux/Unix. The `cat` command allows the creation of single or multiple files, view file contents, concatenate files, and redirect output in the terminal to a file.

Domain

3 - Power of Command Line

Question 35Skipped

Which command-line tool will create a filename that ends in `.gz`?

zip

bzip2

xz

Correct answer

gzip

Overall explanation

OBJ-3.1: Gzip is a file compression tool that will create a file ending in the .gz extension to identify it as a compressed gzip archive.

Domain

3 - Power of Command Line

Question 36Skipped

Which of the following options is used with tar to create a new .tar archive file?

Correct answer

-c

-v

-f

-n

Overall explanation

OBJ-3.1: The -c option is used to create a new tar file archive.

Domain

3 - Power of Command Line

Question 37Skipped

Which of the following is the file descriptor number used to represent the Standard Out (STDOUT)?

0

Correct answer

1

2

3

Overall explanation

OBJ-3.3: The standard out (STDOUT) is represented by the file descriptor number 1.

Domain

3 - Power of Command Line

Question 38Skipped

Which of the following is the file descriptor number used to represent the Standard In (STDIN)?

Correct answer

0

1

2

3

Overall explanation

OBJ-3.3: The standard in (STDIN) is represented by the file descriptor number 0.

Domain

3 - Power of Command Line

Question 39Skipped

Which option can be used with tail to print the last X bytes of a file to the screen?

-n

-b

Correct answer

-c

-x

Overall explanation

OBJ-3.2: The -c option is used with tail to print only the last X bytes of data to the screen.

Domain

3 - Power of Command Line

Question 40Skipped

Which of the following provides the correct syntax to search for lines beginning with the given pattern using the grep command?

Correct answer

^pattern

pattern^

\$pattern

pattern\$

Overall explanation

OBJ-3.3: To search for lines beginning with the given pattern using grep, ^pattern should be used. If the pattern is enclosed in single quotes, it suppresses the meaning of all of the meta-characters with special meanings.

Domain

3 - Power of Command Line