Question 1Skipped

Which of the following is the act of creating a virtual version of components such as storage devices and computer network resources called?

Correct answer

Virtualization

Virtual Reality

Actualization

Realization

Overall explanation

OBJ-1.4: Virtualization the act of creating a virtual (rather than actual) version of something, including virtual computer hardware platforms, storage devices, and computer network resources.

Domain

1 - Linux Community and Career

Question 2Skipped

What does GUI stand for?

General User Interface

Great User Image

Generic Unique Interlink

Correct answer

Graphical User Interface

Overall explanation

OBJ-1.4: The graphical user interface is a form of user interface that allows users to interact with electronic devices through graphical icons and visual indicators such as secondary notation instead of text-based user interfaces, typed command labels, or text navigation.

Domain

1 - Linux Community and Career

Question 3Skipped

Which of the following does Raspbian Linux run on?

AWS cloud

Smartphone

Correct answer

Raspberry Pi

Vehicle entertainment system

Overall explanation

OBJ-1.1: The Raspberry Pi is a low cost, credit-card sized computer that plugs into a computer monitor or TV and uses a standard keyboard and mouse. It is a capable little device that enables people of all ages to explore computing and learn how to program in languages like Scratch and Python. The operating system Raspbian is a Debian-based Linux that was created to run on this device.

Domain

1 - Linux Community and Career

Question 4Skipped

Which of the following is an example of embedded Linux?

Correct answer

Android

Red Hat Linux

Fedora

Linux Mint

Overall explanation

OBJ-1.1: Android, a Linux kernel-based operating system acquired and extended by Google, has become a highly competitive platform used in smartphones, tablets, and home appliances such as TVs.

Domain

1 - Linux Community and Career

Question 5Skipped

What directly controls hardware and translates the commands from a piece of software into something the hardware can understand and act upon?

Finder

Explorer

Correct answer

Kernel

Procmon

Overall explanation

OBJ-1.4: The kernel directly controls hardware, and it translates the commands from a piece of software into something the hardware can understand and act upon. It also manages hardware resources intelligently, such as memory management, for various software and utilities.

Domain

1 - Linux Community and Career

Question 6Skipped

Which of the following programs on a Linux system could you use as a replacement for Microsoft Word?

Pages

Pico

Correct answer

Writer

Nano

Overall explanation

OBJ-1.2: Writer is a well-known word processor that is part of the LibreOffice suite. It can be used to replace just about anything that Microsoft Word can do. While vi and nano are text editors, they are not full-featured word processors like Microsoft Word. Pages is a word processor developed by Apple, and it only works on Mac OS X systems.

Domain

1 - Linux Community and Career

Question 7Skipped

Which of the following is an American non-profit organization devoted to expanding the range of creative works available for others to build upon legally and to share?

Open Commons

Open Source Non-profit

Correct answer

Creative Commons

Free Creative

Overall explanation

OBJ-1.3: Creative Commons is an American non-profit organization devoted to expanding the range of creative works available for others to build upon legally and to share. The organization has released several copyright-licenses, known as Creative Commons licenses, free of charge to the public. These licenses allow creators to communicate which rights they reserve and which rights they waive for recipients or other creators' benefit.

Domain

1 - Linux Community and Career

Question 8Skipped

What is the generic name given to the action of protecting shell meta-characters from being treated specially by the shell?

Nulling

Correct answer

Quoting

Slashing

Queuing

Overall explanation

OBJ-2.1: Quoting is the generic name given to the action of protecting shell meta-characters from being treated specially by the shell.

Domain

2 - Linux System

Question 9Skipped

Which of the following can be used to represent a single number from 3 to 9?

[3,5,7,9]

Correct answer

[3-9]

[three-nine]

[9-3]

Overall explanation

OBJ-2.4: The range [3-9] is used to represent a single number of either 3, 4, 5, 6, 7, 8, or 9 within a search function.

Domain

2 - Linux System

Question 10Skipped

Which of the following is a valid option for a typical command to get its built-in usage information?

-?

help

--manual

Correct answer

--help

Overall explanation

OBJ-2.2: The --help option is used with most commands to provide built-in information on the command's usage. For more detailed information, info <command> or man <command> could be used instead.

Domain

2 - Linux System

Question 11Skipped

Which option will cause the echo command NOT to output a trailing newline?

-p

Correct answer

-n

-s

-t

Overall explanation

OBJ-2.1: The -n option of the echo command does not output a trailing newline.

Domain

2 - Linux System

Question 12Skipped

Which of the following commands will output a list of all of the file names under your home directory and all subdirectories with file names ending with .pdf?

search .pdf

ls -name -R '*.pdf'

find /home/*.pdf

Correct answer

find ~ -name '*.pdf'

Overall explanation

OBJ-2.1: To display all of the files with a .pdf extension at the end, the command find ~ -name '*.pdf' is used. This will display all files named *.pdf in the home directory.

Domain

2 - Linux System

Question 13Skipped

What is a set of pages that explain every command available on the system?

Correct answer

Man pages

Help pages

Master pages

Informational pages

Overall explanation

OBJ-2.2: The man pages are a set of pages that explain every command available on the system. This includes information on what they do, the specifics of how to execute them, and what command-line arguments or syntax they accept.

Domain

2 - Linux System

Question 14Skipped

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?

/home/jason/documents/

Correct answer

/home/jason

/home

/home/jason/documents/..

Overall explanation

OBJ-2.3: The .. is a special directory reference to the parent of the current present working directory. Using cd .. essentially moves the pwd up a single level to /home/jason.

Domain

2 - Linux System

Question 15Skipped

Which of the following options must be used to remove a directory and its subdirectories?

rmdir -r

Correct answer

rm -r

rmdir

rm -all

Overall explanation

OBJ-2.4: The rm -r option is used to remove a directory and its files/folders recursively.

Domain

2 - Linux System

Question 16Skipped

Which of the following is NOT a valid rule in naming a variable?

Variable names must start with a letter

Correct answer

Variable names must start with numbers

Underscores are used instead of embedded spaces

Punctuation marks are not allowed

Overall explanation

OBJ-2.1: The name of a variable should only contain letters (a to z or A to Z), numbers (0 to 9), or the underscore character (_). Variables should also always start with a letter.

Domain

2 - Linux System

Question 17Skipped

What is the proper command to use to compress the file filename.txt into the zip archive called myfile.zip?

Correct answer

zip myfile.zip filename.txt

unzip filename.txt myfile.zip

zip filename.txt myfile.zip

unzip myfile.zip filename.txt

Overall explanation

OBJ-3.1: The syntax for zipping a file into a zip archive is "zip myfile.zip filename.txt".

Domain

3 - Power of Command Line

Question 18Skipped

What statement is used to get input from the terminal when a shell script is being run?

input

scan

Correct answer

read

in

Overall explanation

OBJ-3.3: The read command is used to get input from the terminal when using a shell script.

Domain

3 - Power of Command Line

Question 19Skipped

Consider the following script:

```
#!/bin/bash
ip=`route -n | grep UG | tr -s " " | cut -f 2 -d " "`
echo "Checking to see if $ip is up..."
ping -c 5 $ip
```

Which of the following would be the first line displayed to the screen when the script is executed by the user?

Pinging ipaddress...

Correct answer

Checking to see if ipaddress is up...

Checking ipaddress...

Pinging IP...

Overall explanation

OBJ-3.3: The line in the script that starts with the echo command will cause the string, "Checking to see if $ip is up..." will be executed. When this is executed, the value of $ip will be replaced with the result of the command in the second line (which contains route).

Domain

3 - Power of Command Line

Question 20Skipped

Which option can be used with tail to print the last 10 lines of a file and then keep printing any new lines that may be added continuously?

-n

Correct answer

-f

-x

-a

Overall explanation

OBJ-3.2: The -f option is used to "follow" the contents of the file. This lets tail print the last 10 lines of a file (usually a log file) and continue to print out new lines to the screen as they are added to the file.

Domain

3 - Power of Command Line

Question 21Skipped

Which command is used to make a shell variable known to subsequently executed programs?

announce

env

Correct answer

export

transfer

Overall explanation

OBJ-3.3: The command export is used to make a shell variable known to subsequently executed programs. Essentially, the export command creates a globally accessible variable when it is run.

Domain

3 - Power of Command Line

Question 22Skipped

What option can be used with cat to display line numbers with the text of a file to the screen?

#

-x

Correct answer

-n

-1

Overall explanation

OBJ-3.2: The -n option will show the line numbers next to a file's contents when displayed to the screen. For example, "cat -n song.txt" will display the contents of the song.txt file with line numbers down the left column of the display.

Domain

3 - Power of Command Line

Question 23Skipped

What is one of the most basic features of a shell script?

The ability to compile programs

Correct answer

The ability to run commands

The ability to ask for user input

The ability to display command output information

Overall explanation

OBJ-3.3: A shell script is a computer program designed to be run by the shell. Typical operations performed by shell scripts include file manipulation and command execution. The most basic scripts run commands in serial order and do not provide any output back to the screen or seek input from a user.

Domain

3 - Power of Command Line

Question 24Skipped

Which of the following commands will create an archive file, named backup.tar, containing all the files from the directory /home?

Correct answer

tar -cf backup.tar /home

tar -cf /home backup.tar

tar -xf /home backup.tar

tar -xf backup.tar /home

Overall explanation

OBJ-3.1: The tar command allows you to quickly access a collection of files and place them into a highly compressed archive file. The -c option creates a new archive while -f uses the given filename as the archive's filename. Specifying the directory ensures the files to be placed in the archive file come from that folder.

Domain

3 - Power of Command Line

Question 25Skipped

Which command is used to print the first 10 lines of a file to the display?

cat

tail

Correct answer

head

less

Overall explanation

OBJ-3.2: Head command is the opposite of the tail command. The head command is used to print the first 10 lines of a file. The tail command is used to print the last 10 lines of a file.

Domain

3 - Power of Command Line

Question 26Skipped

What does HCL mean?

Hindustan Computer Limited

Correct answer

Hardware Compatibility List

Hardware Computer License

House Computer Linux

Overall explanation

OBJ-4.2: A hardware compatibility list or HCL lists tested, compatible, and sometimes incompatible hardware devices for a particular distro.

Domain

4 - Linux Operating System

Question 27Skipped

What is a daemon?

A specialized system file

A type of virus that destroys system files

Correct answer

A program that runs in the background of the system

A configuration file

Overall explanation

OBJ-4.3: A daemon is a computer program that runs as a background process rather than under the direct control of an interactive user. Daemons are commonly used for processes that maintain server operations, such as the HTTPD (HTTP daemon) used by Apache to provide web server services to an end-user.

Domain

4 - Linux Operating System

Question 28Skipped

Which of the following is a requirement of the GPL license but not the BSD license?

The GPL license forbids the removal of copyright and license notices from source code files that are distributed

The GPL license contains a disclaimer of warranty requiring users not to hold the software authors liable for any damages

The GPL license requires that any legal disputes be settled with the mediation of the Free Software Foundation

Correct answer

Users who modify and distribute the software under the GPL license must make the modifications they made available to the recipients under the same license

Overall explanation

OBJ-4.1: The GPL license is copyleft; therefore, users must disclose the source code and make any modified versions of the code open source. Under GPL, users cannot change any of the original license terms or introduce their own. The BSD license family does not compel users to do any of these things and instead has fairly relaxed redistribution terms.

Domain

4 - Linux Operating System

Question 29Skipped

Which of the following is the correct order of a computer's operation?

(1) The computer waits for user input, (2) The computer executes the command, (3) The user selects a command and enters it via the keyboard or mouse

(1) The computer executes the command, (2) The computer waits for user input, (3) The user selects a command and enters it via the keyboard or mouse

(1) The user selects a command and enters it via the keyboard or mouse, (2) The computer executes the command, (3) The computer waits for user input

Correct answer

(1) The computer waits for user input, (2) The user selects a command and enters it via the keyboard or mouse, (3) The computer executes the command

Overall explanation

OBJ-4.2: The computer waits for user input; then the user issues a command then the computer executes the command.

Domain

4 - Linux Operating System

Question 30Skipped

After installing a new package, in which directory are you most likely to find its configuration file?

/lib

Correct answer

/etc

/conf

/usr

Overall explanation

OBJ-4.3: /etc is a folder which contains all your system configuration files.

Domain

4 - Linux Operating System

Question 31Skipped

Which of the following displays network connections for Transmission Control Protocol, routing tables, and a number of network interface and network protocol statistics?

net

ping

Correct answer

netstat

traceroute

Overall explanation

OBJ-4.4: netstat is a command that displays network connections for Transmission Control Protocol, routing tables, and a number of network interface and network protocol statistics.

Domain

4 - Linux Operating System

Question 32Skipped

Which of the following directories is often used to store log files?

Correct answer

/var

/temp

/dev/hdc1d2p3

/usr

Overall explanation

OBJ-4.3: /var is a standard subdirectory of the root directory in Linux contains files to which the system writes data during the course of its operation. /var/log contains log files.

Domain

4 - Linux Operating System

Question 33Skipped

Which of the following is used as a virtual or pseudo filesystem to provide a tree of all of the device nodes and drivers in the running kernel?

/boot

/proc

/sys

Correct answer

/dev

Overall explanation

OBJ-4.3: The /dev tree contains device nodes, which gives user space access to the device drivers in your OS's running kernel. All POSIX type OSes have a /dev tree.

Domain

4 - Linux Operating System

Question 34Skipped

Which of the following files holds the definition of the local user accounts?

c/users

Correct answer

/etc/passwd

c/id

c/home

Overall explanation

OBJ-5.2: /etc/passwd contains the attributes of (i.e., basic information about) each user or account.

Domain

5 - Security and File Permissions

Question 35Skipped

What permissions does foo1.txt have after running "chmod 644 foo1.txt"?

Correct answer

foo1.txt is readable/writeable by the owner

foo1.txt is readable/writable by everyone

foo1.txt is executable by the owner

foo1.txt is writeable by the group

Overall explanation

OBJ-5.3: Permissions of 644 means that files are readable and writable by the file owner and readable by users in the group owner of that file and readable by everyone else.

Domain

5 - Security and File Permissions

Question 36Skipped

Which type of link is used to points to another file like a shortcut in Windows or a Macintosh alias?

Hard link

Correct answer

Symbolic link

Sticky link

Smooth link

Overall explanation

OBJ-5.4: A symbolic link, also termed a soft link, is a special kind of file that points to another file, much like a shortcut in Windows or a Macintosh alias. Unlike a hard link, a symbolic link does not contain the data in the target file.

Domain

5 - Security and File Permissions

Question 37Skipped

Which type of link contains the data in the target file?

Correct answer

Hard link

Symbolic link

Sticky link

Smooth link

Overall explanation

OBJ-5.4: A hard link, unlike a symbolic link, contains the data in the target file.

Domain

5 - Security and File Permissions

Question 38Skipped

Which of the following commands is used to show the information about a directory or a symbolic link?

Correct answer

ls -d

ls -s

ln -d

ln -s

Overall explanation

OBJ-5.4: ls -d shows information about a directory or symbolic link. This information is usually just its respective path, though.

Domain

5 - Security and File Permissions

Question 39Skipped

A file currently has permissions of 755. Which of the following commands would change file permission to r-xr--r--?

chmod u-rx,go-r filename

chmod u+w,go+x filename

chmod r-wr--r-- filename

Correct answer

chmod 544 filename

Overall explanation

OBJ-5.3: To change permission, you use the chmod command. You can either use u+ to add user permission and g+ to add group permissions, or you can use the octal value. In this case, the octal value of r-wr--r-- is 544.

Domain

5 - Security and File Permissions

Question 40Skipped

Which of the following tasks is not performed automatically for a user account when it is created using the useradd command?

Assign a UID

Correct answer

Create the user's home directory

Assign a default shell

Define the user's home directory

Overall explanation

OBJ-5.2: The useradd command does not create the user's home directory by default. To automatically create the user's home directory with the useradd command, the -m option is used to create the user's home directory with default configuration files.

Domain

5 - Security and File Permissions