

Question 1Skipped

Which of the following is a Debian-based computer operating system for Raspberry Pi?

Correct answer

Raspbian

Ubuntu

Solaris

Pi

Overall explanation

OBJ-1.1: Raspbian is a Debian-based computer operating system for Raspberry Pi. It is highly optimized for the Raspberry Pi line's low-performance ARM CPUs.

Domain

1 - Linux Community and Career

Question 2Skipped

Which of the following is an open-source relational database management system?

MyDatabase

Correct answer

MySQL

OpenDatabase

MSdatabase

Overall explanation

OBJ-1.2: MySQL is an open-source relational database management system.

Domain

1 - Linux Community and Career

Question 3Skipped

What command would you use to get comprehensive documentation about any command in Linux?

echo command

locate command

Correct answer

man command

get command

Overall explanation

OBJ-2.2: The man command in Linux is used to display the user manual of any command that we can run on the terminal.

Domain

2 - Linux System

Question 4Skipped

What key do you press to quit reading a man page?

Correct answer

Q

X

ALT + F4

ESC key

Overall explanation

OBJ-2.2: When done reading through the man page, use the letter q to quit.

Domain

2 - Linux System

Question 5Skipped

Which command searches manual page names and descriptions for a user-supplied keyword?

pros

props

apos

Correct answer

apropos

Overall explanation

OBJ-2.2: The command apropos searches manual page names and descriptions for a user-supplied keyword.

Domain

2 - Linux System

Question 6Skipped

What command should be used to display the permissions for every file in the current directory?

Correct answer

ls -la

dir -la

ls -all

dir -all

Overall explanation

OBJ-2.3: The command `ls -la` will provide the long view of the directory listing with all of the information, including the file permissions.

Domain

2 - Linux System

Question 7Skipped

To see all the variables that are in the user's environment, use the _____ command.

printer

ping

Correct answer

printenv

processvar

Overall explanation

OBJ-2.1: The `printenv` command displays the values of environment variables.

Domain

2 - Linux System

Question 8Skipped

In order to rename the directory `~/documents/letters` to `~/documents/archive`, which of the following commands should be used?

Correct answer

`mv ~/documents/letters ~/documents/archive`

`cp -m ~/documents/letters ~/documents/archive`

`copy -m ~/documents/letters ~/documents/archive`

`rename ~/documents/letters ~/documents/archive`

Overall explanation

OBJ-2.4: To rename a file in Linux, you utilize the move (`mv`) command. The command should use the syntax of `mv <original_filename> <new_filename>`. `Rename` and `copy` are not valid Linux commands but instead are used in Windows. The `cp` (`copy`) command will make a new file with the name "archive"; therefore, it is not the correct answer.

Domain

2 - Linux System

Question 9Skipped

Which software handles the installation and removal of software on Debian and Ubuntu?

Correct answer

apt

install

rpm

yum

Overall explanation

OBJ-1.2: Advanced Package Tool, or APT, is a free software user interface that works with core libraries to handle the installation and removal of software on Debian, Ubuntu, and related Linux distributions.

Domain

1 - Linux Community and Career

Question 10Skipped

What is a pre-integrated, self-contained system made by combining a software application (e.g., server software) with just enough operating system to run optimally on industry-standard hardware or a virtual machine?

Turnkey

Server solutions

Virtual server

Correct answer

Virtual appliance

Overall explanation

OBJ-1.4: A virtual appliance is a pre-integrated, self-contained system that is made by combining a software application (e.g., server software) with just enough operating system for it to run optimally on industry-standard hardware or a virtual machine. This offers companies several benefits over traditional software applications installed on top of a full operating system.

Domain

1 - Linux Community and Career

Question 11Skipped

Which of the following is TRUE about open source software?

Open source software is always free

Correct answer

Open source software is a prominent example of open collaboration

Open source software is more secure than closed source software

Open source software does not have any support

Overall explanation

OBJ-1.3: Open-source software is usually developed in a collaborative public manner and is a good example of open collaboration.

Domain

1 - Linux Community and Career

Question 12Skipped

Which keyboard shortcut allows pasting a previously copied highlighted text while working in the command line terminal?

Correct answer

CTRL + SHIFT + V

CTRL + V

CTRL + TAB + V

CTRL + ALT + V

Overall explanation

OBJ-1.4: Holding down the CTRL and SHIFT keys and pressing V allows any previously copied highlighted text in the terminal to be pasted. Pressing CTRL + V within the terminal waits for a character press after the V. So pressing CTRL + V + R inserts the letter R to the terminal.

Domain

1 - Linux Community and Career

Question 13Skipped

Which of the following can you NOT install Linux on?

Cloud servers

Desktops

Smartphones

Correct answer

Smartcard

Overall explanation

OBJ-1.1: Linux can be installed on just about anything, including desktops/laptops, servers, the cloud, smartphones/tablets, the IoTs, and even a Smart TV. But, Linux cannot be installed on a

smartcard since it is a device with extremely limited storage space and no processing power. A smartcard is used as a form of two-factor authentication in corporate networks.

Domain

1 - Linux Community and Career

Question 14Skipped

Which command shows all of the directories that the shell searches for programs?

less \$PWD

more \$ALL_PATH

get \$PATH

Correct answer

echo \$PATH

Overall explanation

OBJ-2.1: The echo \$PATH command shows all the directories used by the shell during a search for a program. By default, anything listed in the \$PATH will be looked at by the shell before returning an error that states it cannot find a file's location.

Domain

2 - Linux System

Question 15Skipped

Where does Linux stores most of its log files in the directory tree?

/var/system

/sys/var/log

Correct answer

/var/log

/system/log/var

Overall explanation

OBJ-4.3: Most of the Linux log files are stored in /var/log portion of the directory tree. This is the common log directory for all programs, but some programs keep their log files within their own specialized directories, as well.

Domain

4 - Linux Operating System

Question 16Skipped

In computer networks, what does DHCP stand for?

Correct answer

Dynamic Host Configuration Protocol

Data Host Connection Protocol

Direct Host Connection Protocol

Direct Host Control Protocol

Overall explanation

OBJ-4.4: The DHCP or Dynamic Host Configuration Protocol is a network management protocol where a DHCP server dynamically assigns an IP address and other network configuration parameters to each device on a network to communicate with other IP networks.

Domain

4 - Linux Operating System

Question 17Skipped

Which type of IP addresses uses a dotted-decimal notation?

Correct answer

IPv4

IPv5

IPv6

MAC

Overall explanation

OBJ-4.4: IPv4 uses dotted decimal notation, such as 192.168.1.1. IPv6 uses a 128-bit address written as hexadecimal digits separated by colons. MAC addresses are 48-bit addresses written in hexadecimal digits separated by colons.

Domain

4 - Linux Operating System

Question 18Skipped

Which of the following commands can be used to resolve a DNS name to an IP address?

dns

query

Correct answer

host

iplookup

Overall explanation

OBJ-4.4: The host command is used for DNS (Domain Name System) lookup operations. It is used to find the IP address of a particular domain name or the domain name of a particular IP

address. Nslookup and dig are also commands that can be used to lookup a domain name and convert it to an IP address within a Linux system.

Domain

4 - Linux Operating System

Question 19Skipped

Which information is used by a computer to connect to a typical local area network?

User group

Correct answer

IP address

Domain name

Memory capacity

Overall explanation

OBJ-4.4: Network administrators assign an IP address to each device connected to a network. An IP address serves two main functions: host or network interface identification and location addressing.

Domain

4 - Linux Operating System

Question 20Skipped

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

/conf

Correct answer

/etc

/usr

/opt

Overall explanation

OBJ-4.3: The /etc folder is where configuration files are usually stored in a Linux system.

Domain

4 - Linux Operating System

Question 21Skipped

What command would you use to create a symbolic link in Linux?

ln -d

Correct answer

ln -s

link -d

link -s

Overall explanation

OBJ-5.4: To create a soft link from the shell, you should use "ln -s <original_file> <link_created>". The soft link is essentially a pointer to the original file, and when the original file is deleted, the soft link does not point to anything, so "no such file or directory" is reported.

Domain

5 - Security and File Permissions

Question 22Skipped

What permissions would be represented by the octal 517?

rwX--Xr-X

Correct answer

r-X--XrWX

--Xr-XrWX

r-XrWX--X

Overall explanation

OBJ-5.3: In Linux, you can convert letter permissions to octals by giving 4 for each R, 2 for each W, and 1 for each X. So, R-X is 5, --X is 1, and RWX is 7.

Domain

5 - Security and File Permissions

Question 23Skipped

What is the limit on the number of user accounts in a single computer in Linux?

10

100

1000

Correct answer

Unlimited

Overall explanation

OBJ-5.2: In Linux, there is virtually no limit to the number of user accounts on a single computer. It is considered to be unlimited.

Domain

5 - Security and File Permissions

Question 24Skipped

Where are the passwords stored for users on a Linux system?

/etc/passwd

Correct answer

/etc/shadow

/etc/skel

/etc/group

Overall explanation

OBJ-5.2: 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 UID is usually used to represent the root user on a Linux system?

Correct answer

0

1

100

1000

Overall explanation

OBJ-5.1: The UID of 0 has a special role: it is always the root account (i.e., the superuser or administrative user). Although the user name can be changed on this account, and additional accounts can be created with the same UID, neither action is recommended since they are considered a poor security practice.

Domain

5 - Security and File Permissions

Question 26Skipped

How would you represent rwxr-xr-- in octal notation?

Correct answer

754

742

724

624

Overall explanation

OBJ-5.3: In Linux, you can convert letter permissions to octal by giving 4 for each R, 2 for each W, and 1 for each X. So, RWX is 7, R-X is 5, and R-- is 4.

Domain

5 - Security and File Permissions

Question 27Skipped

Which of the following information is provided in the default output of the who command?

Username, password, ip address, shut down time

GID, UID, password, files

Correct answer

Username, Terminal Identifier, Login Date and Time

Username, User Group, Passwords, Files

Overall explanation

OBJ-5.1: The output of the who command includes Username, Terminal Identifier, Login Date, and Time. The who command displays a list of users who are currently logged into the computer. The who command is related to the command w, which provides the same information but also displays additional data and statistics.

Domain

5 - Security and File Permissions

Question 28Skipped

Which of the following is the dmesg command used for?

To show the user login and logoff attempts

Correct answer

To show the kernel log messages

To show the syslog file's informational messages

To show the messages for the daemon logs

Overall explanation

OBJ-4.3: The dmesg (display message or driver message) command is a command on most Unix-like operating systems that prints the message buffer of the kernel. The output of this

command typically contains the messages produced by the device drivers and serves to show the kernel's log messages to the screen.

Domain

4 - Linux Operating System

Question 29Skipped

Which of the following software packages is a mail server?

Thunderbird

Apache

Correct answer

Postfix

GIMP

Overall explanation

OBJ-4.1: Postfix is a free and open-source mail transfer agent that routes and delivers electronic mail. Thunderbird is a mail client, Apache is a web server, and GIMP is an image manipulation program.

Domain

4 - Linux Operating System

Question 30Skipped

What is the output of the following command?

```
for token in a b c;
do echo -n ${token};
done
```

anbncn

Correct answer

abc

\$token\$token\$token

{a}{b}{c}

Overall explanation

OBJ-3.3: A token is a sequence of characters that forms a word or punctuation sign. It is made up of ordinary characters or operator characters but not both.

Domain

3 - Power of Command Line

Question 31Skipped

Which of the following commands creates an archive file work.tar from the contents of the directory ./work/?

tar --new work.tar ./work/

Correct answer

tar -cf work.tar ./work/

tar --create work.tgz --content ./work/

tar work.tar < ./work/

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 32Skipped

Which command will display the last line of the file document.txt?

head -n 1 document.txt

Correct answer

tail -n 1 document.txt

tail document.txt

last -n 1 document.txt

Overall explanation

OBJ-3.2: The tail command with the -n 1 option will show the last line of a file.

Domain

3 - Power of Command Line

Question 33Skipped

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

cat

Correct answer

tail

head

less

Overall explanation

OBJ-3.2: Tail is a command which prints the last few numbers of lines (10 lines by default) of a certain file, then terminates.

Domain

3 - Power of Command Line

Question 34Skipped

Which of the following is used to redirect the standard output of a command to a file?

Correct answer

1>

2>

&1

&2

Overall explanation

OBJ-3.2: To redirect the standard output, 1> is used with a command.

Domain

3 - Power of Command Line

Question 35Skipped

Which of the following commands is used to extract files from a zip archive?

zip -x

tar -xzf

Correct answer

unzip

untar -z

Overall explanation

OBJ-3.1: Unzip will list, test, or extract files from a ZIP archive, commonly found on Unix systems. The default behavior (with no options) is to extract into the current directory (and subdirectories below it) all files from the specified ZIP archive.

Domain

3 - Power of Command Line

Question 36Skipped

Which of the following options is used with tar to display the tar command's progress during execution?

-c

Correct answer

-v

-f

-n

Overall explanation

OBJ-3.1: The -v option is used to verbosely show the .tar file progress during execution.

Domain

3 - Power of Command Line

Question 37Skipped

Which of the following is used to untar a tar archive file?

untar

Correct answer

tar -x

unzip -t

tar -u

Overall explanation

OBJ-3.1: The -x option in tar is used to extract the contents of a tar archive.

Domain

3 - Power of Command Line

Question 38Skipped

Which command is used to print one page of text to the screen at a time?

cat

tail

head

Correct answer

less

Overall explanation

OBJ-3.2: On Linux systems, less is a command that displays file contents or commands output one page at a time in your terminal. Less is most useful for viewing the content of large files or the results of commands that produce many lines of output. The content displayed by less can be navigated by entering keyboard shortcuts.

Domain

3 - Power of Command Line

Question 39Skipped

Which of the following characters in a shell prompt indicates the shell is running with root privileges?

&

Correct answer

#

\$

Overall explanation

OBJ-2.1: When the prompt ends in a hashtag/pound sign symbol (#), it indicates the current user has root privileges.

Domain

2 - Linux System

Question 40Skipped

Typing \$ followed by pressing which key twice, in quick succession, will list all of the variables?

CTRL

ALT

SHIFT

Correct answer

TAB

Overall explanation

OBJ-2.1: Typing \$ followed by TAB TAB in quick succession will list all variables.

Domain

2 - Linux System