1)If i can't ping a website such as google.com what might i ping instead to check for network connectivity The gateway

2)Firewalls do not need to be configured on Linux servers because Linux systems don't get viruses. F

3)Only one network interface can be added in Linux F

4)The deamon that provides logging services for applications and programs is: Syslogd

5)What port does SSh typically run on 22

6)Where is the users configuration file located /etc/passwd

7)What does pkill do? Choose the best answer Kills a process

8)The command chage con't be used to Del a user

9)SeLinux is set to \_\_\_ by default on newer versions Of Red Hat type operating system Enforing

10)A gateway must be added to Linux before connectivity to the network T

11)Which of the following is not a fucntion of the netstat command? View interface statistics

12)Which of the following is not a function of the netstat command?

View the route used by packets to reach a given destination

13)What is used to partition a network into different logical networks?

Subnetting

14) Linux cannot integrate with Windows Active Directory

True

15)firewalld is the default firewall on Ubuntu systems

False

16)Destributions typically display networking information

True

17)Which command is used to keep track of suspicious connections?

Netstat

18)What does !! signify in the /etc/shadow file?

The account is locked

19)What permissions are set for Read, Write and Execute for Owner and read for group and world

744

20)You have an existing interface eth0 and have now added a new interface eth1 . You notice that the count of RX and TX packets is 0 in the output if ifconfig . What does this indicate?

The eth1 interface is not being used to route network traffic

21)Which is the standard port used for DNS service?

80

22)What is the command that adds users within Linux

useradd

23)Adding users must be performed with elevated privileges

True

24)Which password is required for authentication to use sudo ?

User’ s Password

25)ModSecurity configuration file:

/etc/modsecurity.conf

26)Which passwd option use to make the password empty for user Bob

-d Bob

27)Which are the four types of aliases found in the /etc/sudoers file?

User\_Alias , Host\_Alias , Runas\_Alias , and Cmnd\_Alias

28)The klogd facility gets the messages from syslogd and decides the action based on configuration settings. True or False?

True

29)DOSSitelnterval modevasive parameter:

The amount of time an IP address stays on the blacklist.

30)ModSecurity configuration file:

/etc/apache2/mods-enabled/evasive.conf

31)CentOS is the binary equivalent of Red Hat

True

32)If we change file permissions to 777, what does this mean?

Changes file permissions to read, write, and execute for Owner, Group, and World

33)How is cron used?

Manual scheduling of startup and shutdown of the system

34)Which super server has replaced inetd?

xinetd

35)Where is the users configuration file located

/etc/users

36)Discretionary access control should be implemented on files as well as directories

True

37)Deleting a user is accomplished through the command

Userdel

38)Types of IP addresses used on the Internet?

Public and Private

39)Who can modified the /etc/passwd file?

Root user

40)If you are trying to login to a server and are unabled to connect, which command would you use to verify network connectivily?

Ping

41)How to install Modevasive on Debian

apt-get install libapache2-mod-evasive

42) SSH is an insecure way of accessing other system

False

43) Zones within firewalld are like\_\_\_\_in iptables:

Zones

44) The system administrator is seeing a surge within the number of logged messages……::::

Due to configuration errors or hadware errors

45) The deamon that provides logging service for applications and programs is

Syslogd

46) System administrators can use logs for

Installing new packages

47) Modsecurity is

Plug in module for monitor web traffic

48) Linux cannot integrate with windows active directory

True

49) Using US

True

50) What is the main feature of a super server?

Run as a master process and listen for incoming TCP connections and then start the required process

51) Which of the following is not a probable reason for the Host unreachable error?

Incorrect username/password used for login

52) If DOSSiteInterval parameter in modevasive set to 1 :

That means that if single IP address requests any resources

53) What attack does Modevasive protect against

- b/ Brute-force

54) The following can show commands of

- ps

55) Should xwindows be used самый длинный ответ

- Depends ...

RK-1(midterm) SOS

1)GRUB cannot be utilized with UEFI.True or wrong?

False

2)On which system DEFAULT\_RUNLEVEL variable defines….

Ubuntu

3)The firmware bootloader for Sparc systems is called\_\_\_\_\_\_\_\_\_\_

SILO

4) A system administrator wants to make few changes to the CUPS server configuration. Changes should be made in which of the files?

cupsd.conf

5)In GRUB legacy,the grub= directive defines default….

False

6) CUPS stands for: Common UNIX Printing System

7) The transfer of messages between machines and routing them to the correct

destination is done by the Mail Transfer Agents (MTAs).

True

8)/boot/grub/grub.conf t is the real location of the GRUB Legacy configuration file?

True

9)The file which is the main for GRUB2 in the CENTOs system

/boot/grub2/grub.

10) Instead of running ntpd as a daemon, the administrator wants to run it as a

background process. Which of the following options should be used?

–n

11) The file which is the main for GRUB 2 on an Ubuntu system is \_

/boot/grub/grub.cfg

12) Which of the following commands will allow you to change the system runlevel,

on a system with traditional init? (choose two)

telinit, init

13) Which of the following options, when used with the mailq command, will resend the messages in the queue? –q

14)

What happens if the user sysadmin invokes the mail command interface and

there are no unread mail messages? The message No mail for sysadmin is displayed

15) Which directory is used primarily for storing log messages?

/var/log

16)

In the last six months, the administrator had to adjust the hardware clock on

three different occasions. He can find information regarding past clock values from

/etc/adjtime

17) The second stage of the boot process is:

The Bootloader (LILO/GRUB) stage  
18) In GRUB Legacy, which directive is not typically used after a title directive?

(choose one)

boot

19) A user is replying to a mail message. After typing the response, which of the

following key combinations will save and send the message? Ctrl+D

20) The core software component that tells the hardware what actions to take is

called the \_\_\_\_\_\_\_\_.

Kernel

21) Which is the default runlevel for Debian based Linux systems?

2

22) A user reports to the system administrator that when printing a Japanese web

page, he gets junk characters. Which of the following settings should the system

administrator check in the CUPS configuration file?

DefaultLanguage

23) Which of the following commands will set the system time to the same time as

the hardware clock? hwclock –s24) Which of the following is not a Linux boot system? bootup

25) Which runlevel number defines multi-user with no networking services?2

26) The fourth stage of the boot process is:

The init phase

27) The behavior of the newaliases command is identical to the sendmail –bi command for systems that are using sendmail. True or False?

True

28)

. Which of the following is not an advantage of GRUB 2 over GRUB Legacy?

Command-line interface

29) SMTP is the standard protocol for communication between email server and

mail client.

True or False?

False

30)1 runlevel number defines

Start??

31)Initframs

Contains an script that loads drivers..

Is an archive..

32) A printer’s status cannot be offline just because it has run out of paper.

True or False?False

33) While accessing mail through the mail command interface, a user sees 5 new

messages in his mailbox. Since the second message appears important, he would

like to read that message first. Which mail command should be used?2

34)The time before booting

GRUB\_TIMEOUT

35)What run level should be added to the end of……

Kernel

36) Which of the following functions is NOT provided by the printer service?

Economizing use of the printer cartridge

37) Which file is overwritten at the end of each boot process with the messages

that were generated while booting?

/var/log/dmesg \*

38)Characterizes rules,permissions

BIOS

39) A user is having trouble accessing the CDROM drive. He wants to send a

message to the root user for help. Which of the following commands will create a

new message that will be sent to the root user?

mail root

40) Which of the following is not a daemon used for logging?

Ilogd

41) Which of the following commands can be used to halt the system? (choose two)Halt,PowerOFF

42)A essential work of a linuxbootloader is:

To load the kernel

43)Systemd uses

Targets

44) Which directories exist in the /etc/rc.d directory? d. rc0.d, rc1.d, rc2.d, rc3.d, rc4.d, rc5.d and rc6.d

45) Which of the following can be used to restart the HTTP service? (choose two)

/etc/init.d/httpd restart

service httpd restart

46) The two login types are:

CLI and GUI

47)Which file should be edited instead of changing the main conf file for GRUB2

/etc/default/grub

48) . How can you remove a package using an rpm command?

Rpm –e

49) The location of users’ default shells is stored in the \_\_\_\_\_\_ file

/etc/passwd

50) You have observed that your organization is not getting any incoming

messages. What would be the most likely problem?

Port 25 is not open on the firewall

51) Which of the following changes is NOT possible by modifying various settings in

the CUPS configuration file?

Maximum number of printers that can be configured

52) What does a distribution provide to add and remove software from the system? Package manager

53) . Which runlevel number is defined as “user-definable”?

4

54) Which of the following is NOT a core module of qmail?

qmail-master

55)In Grub Legacy,the boot directive defines an operating system to boot.

FALSE

56) Which of the following information is NOT available in the output from the mailq command?

Out time

57) The first process that the kernel launches is called the \_\_\_\_\_ process.

Init

58) Two NTP servers are used by ntpd; one runs Stratum-2 clock while the other

uses Stratum-4. Which one is considered to be more accurate?

Stratum-2

59) . Mike, a production support engineer, needs to temporarily leave the company

on an emergency leave. In his absence Mike wants Francis, another support

engineer, to receive the support messages. What should Mike do? Create .forward file in his home directory and redirect messages

60) Which of the following commands can be used to create an encrypted password

that can be used with the password directive in GRUB Legacy: grub-md5-crypt

61) Which of taking arfter considered substitutions for the conventional init process? (choose two)

Upstart Systemd62) A mail alias can be created for which of the following?

User name

63) Internet Printing Protocol (IPP) is a network protocol that supports which of

the following? Both authentication and access control

64) . In GRUB Legacy, the password directive in the title directive setting means:

To boot a specific operating system, a password must be entered

65) In GRUB Legacy, the password directive in the global setting means:

The user must submit the specified password before appending, editing or

using the GRUB command line

66) For GRUB Legacy, which of the following is used to specify the second partition

of the second hard drive?

(hd1,1)

67) The system clock contains both time and time zone information.

True or False? True

68) . A software release cycle describes:

How often the software’s memory is released back to the operating system69) Instead of running ntpd as a daemon, the administrator wants to run it as a background process. Which of the following options should be used?

–n

70) By mistake, a user sends a file to print on a remote printer. The best course of action is:

Delete the document if the print document is still in the queue

71) . The reference time that the system time is calculated from is known as:

Epoch time

72) . Deborah created a new alias and added it to the mail alias file. Next, she tried to use the alias through the sendmail command, but the new alias is not working. What is the most likely reason? File aliases.db was not rebuilt using the newaliases command

73) NTP stands for:

Network Time Protocol

**Рк-2(endterm) Linux OS**

**1)**What does pkill do? Choose the best answer

**An:** Kills a process

**2)** If I can’t ping a website, such as google.com, what might I ping instead to check for network connectivity:

**An:** The gateway

**3)** The command chage can’t be used to

**An:** Delete a user

**4)** Why would you use sticky bits?

**An: To allow a user to execute as root without elevating privileges**.

**5)** Firewalls do not need to be configured on linux servers because Linux systems don’t get viruses.

**An:** неверно

**6)** SeLinux is set to \_\_\_\_ by default on newer versions of Red Hat type operating systems

**An:** Enforcing

**7)** The file which used to verify the services indicated within the inetd configuration

**An:** /etc/services

**8)** firewalld is the default firewall in newer versions of Red Hat type operating systems

**An:**

**9)** Which of the following is not a function of the netstat command?

**An:** View the route used by packets to reach a given destination

**10)** Only one network interface can be added in Linux

**An:** неверно

**11)** The system administrator needs to create a transitory client account to be utilized for as it were six days. Promptly after six days, the access following values should be set for the transitory client within the *shadow* file:

**An:** Expire date = today + 6

**12)** A gateway must be added to Linux before connectivity to the network.

**An:** верно

**13)** Some distributions allow software to be installed at main operating system installation time

**An:** верно

**14)** Which user information is missing from the *passwd* file record?

**An:** The user’s password

**15)** Using SUDO allows a user to elevate privileges.

**An:** Верно

**16)** The daemon that provides logging services for applications and programs is:

**An:** Syslogd

**17)** What port does SSH typically run on

**An:** 22

**18)** Using SElinux can be better at protecting the system because ACL’s cannot protect you against everything.

**An:** верно

**19)** Where is the users configuration file located

**An:** /etc/passwd

**20)** How to install ModSecurity on CentOS

**An:** *sudo* yum install mod\_security

**21)**How to install ModSecurity on Debian

**An:** *sudo* apt install libapache2-modsecurity

**22)** How to install ModSecurity on Ubuntu

**An:** *sudo* apt-get install libapache2-mod-security2

**23)** What is the main feature of a super server?

**An: Run as a master process and listen for incoming TCP connections and then start the required process**

**24)** What attack does Modevasive protect against

**An:** Brute-force

**25)** What is used to partition a network into different logical networks?

**An:** Subnetting

**26)** DOSSiteCount modevasive parameter:

**An:** the total number of requests for the same site by the same IP address

**27)** Linux cannot integrate with Windows Active Directory

**An:** верно

**28)** Discretionary access control should be implemented on files as well as directories

**An:** верно

**29)** firewalld is the default firewall on Ubuntu systems

**An:** неверно

**30)** Scripts can be modified to add additional configuration items to a user’s profile.

**An:** верно

**31)** System administrators can use logs for:

**An:** Tuning the system for efficiency or security

**32)** DOSblockingPeriod modevasive parameter :

An: the amount of time an Ip address stays on the blacklist.

**33)** Who can modified the /etc/passwd file?

**An:** Root user

**34**) Which password is required for authentication to use sudo?

**An:** User’s Passwd

**35)** SELinux can be used to apply least privilege to linux users

**An:** верно

**36)** Which super server has replaced inetd?

**An:** xinetd

**37)** The klogd facility gets the messages from syslod and decides the action based on configuration settings. True or False?

**An:** False

**38)** An standart client, Bob has the following record in the /etc/passwd record. What does the x demonstrate? *bob:x:1021:1020:purchase\_dept\_user:/home/usr/bob:/bin/bash*

**An:** The encrypted password has been stored in the /etc/shadow file

**39)** Wich file stores the encrypted password?

**An:** /etc/shadow

**40)** You have an existing interface eth0 and have now added a new interface eth1. You notice that the count of RX and TX packets is 0 in the output of ifconfig. What d…

**An:** The eth1 interface has not been configured on the system.

**41)** What does the /etc/init.d directory contain?

**An:** Scripts for the different run levels

**42)** eth0 is only name that can be used for a network interface

**An:** неверно

**43)** Which file is used to configure the sudo command?

**An:** /etc/sudoers

**44)** Which of the following is not a state of ports as reported by nmap?

**An:** Suspended

**45)** How to install Modevasive on **Debian/Ubuntu**

**An**: sudo apt-get install libapache2-mod-evasive

**46)** How to install Modevasive on **CentOS / RedHat**

**An:** sudo yum install mod\_evasive

**47**) In case the posting of a directory appears certain records with consents set to rwsr-xr-x. What does this demonstrate?

**An:** SUID bit is set for the file

**48)** Adding users must be performed with elevated privleges

**An:** верно

**49)** Whitelisting is

**An:** a list of suspicious or malicious entities that should be denied access or running rigths on a network or system

**50**) A password for the root account may be set at installation time

**An:** верно

**51)** Distributions typically display networking information

**An:** верно

**52)** Which command is used to keep track of suspicios connections ?

**An:** netstat

**53**) What does !! signify in the /etc/shadow file

**An:** The account is locked

**54**) What permissions are set for Read, Write and Execute for Owner and read for group and world

**An:** 744

**55**) Logs contain a wealth of data and may include all of the following, except:

**An:** Configuration settings

**56**) You have an existing interface eth0 and have now added a new interface eth1 .  
You notice that the count of RX and TX packets is 0 in the output of ifconfig .  
 What does this indicate?

**An:** The eth1 interface is not being used to route network traffic

**57**) Wich is the standard port used for DNS service

**An:** 80

**58**) What is the command that adds users within Linux

**An:** useradd

**59**) ModSecurity configuration file:

**An:** /etc/modsecurity/modesecurity.conf

**An**:/etc/apache2/mods-enabled/evasive.conf

**60**) Which passwd option use to make the password empty for user Bob

**An:** -d Bob

**61)** The root user can decrypt the password of any user

**An:**

**62**) Which are the four types of aliases found in the /etc/sudoers file?

**An:** User\_Alias, Host\_Alias, Runas\_Alias, and Cmnd\_Alias

**63**) Which of the following is not a probable reason for the Host unreachable error?

**An:** Incorrect username/password used for login

**64)** The following can show commads of running processes, except:

**An:** ps

**65**) If we change file permissions to 777, what does this mean?

**An:** Changes file permissions to read, write, and execute for Owner, Group, and World

**66)** CentOS is the binary equivalent of Red Hat

**An:** верно

**67**) How is cron used?

**An:** Manual scheduling of startup and shutdown of the system

**68)** Which command can’t be used to update user information in the /etc/passwd file?

**An:** Finger

**69**) Can a normal user run privileged commands? Choose the best answer:

a) Yes

b) No

c) No,only root has privileges.

d)Yes, As long as the user has privileges in the sudoers file.

**An:** d

**70**) Arrange the following items in descending order of priority: alert, err, emerg, warning, crit

**An:** emerg, alert, crit, err, warning

**71**) Pay attention to the following record within the passwd file boboc521:520.hr\_dept\_user/home/usr/test user/bin/bash UID and GID for bob, respectively:

**An:** 521 and 520 ?

**72**) If you are trying to login to a server and are unable to connect, which command would you use to verify network connectivity?

**An:** ping

**73**) Types of Ip addresses used on the Internet?

**An:** Public and Private

74) SELinux is very easy to manage and troubleshooting is equally easy

верно

неверно

**An:?**

75) SSH is an insecure way of accessing other systems.

**An:** неверно

**76**) Deleting a user is accomplished through the command

**An:** userdel

**77**) Both owner and group permissions on a user’s home directory need to be set to the user in order for the user to gain access to their directory

**An:** верно

**78)** What does the command chmod do?

**An:** Changes group permissions

**79**) A users shell cannot be added while adding users from useradd command

**An:** верно

**80)** What is the command to view interface within Linux

**An:** ifconfig

**81)** The line root ALL=(ALL)ALL indicates that the root user has permissios to run all commands on all systems without a password.

**An:** неверно

**82**) The maximum value of the field in the */etc/shadow* file which is responsible for the password expiry period

**An:** 99999

**83**) What is SCP

**An:** Copies files from one system to onother over SSH

**84**) Which class IP addresses can be assigned to network interfaces?

**An:** Class A, B and C

**85**) /etc/passwd can be used to see what users are in the system

**An:** верно

**86**) SELinux has poor logging capabilities

**An:** неверно

**87**) A user’s files still may be left on the system even if you delete the user

**An:** верно

**89**) Should xwindows be used on a server?

**An:** Depends …(самый дл ответ)

**90**) What information is not stored in the /etc/shadow file?

**An:** Encrypted password

**91**) UFW is way that we can use iptables within Ubuntu systems

**An:** верно

**92**) The 3th octed is used for creating subnets for Class C networks. True or false?

**An:** верно

**93**) One of the probable reasons for increased TX collisions count in the output of ifconfig could be \_\_\_.

**An:** Network congestion

**94**) Which type of access to the /etc/passwd file has a ordinary user (non root)?

**An:** Read only

**95**) UFW and firewalld are generally easier to configure than iptables

**An:** неверно

**96**) Zones within firewalld are like \_\_\_\_ in iptables:

**An:** Zones

**97**) If DoSSiteInterval parameter in modevasive set to 1:

**An:** That means that if a single Ip address requests any resources on the same website in a single second be temprorarily blacklisted.

**98**) UFW is enabled via what command?

**An:** ufw enable

**99**) What does, sshd: ALL, specified in the hosts.deny file indicate

**An:** Allow SSH connection from all hosts

**100**) The /etc/sudoers file should be edited using the \_\_ editor only

**An:** visudo

**101**) DoSSiteInterval modevasive parameter

**An:** this specifies the number of seconds that DOSSiteCount monitors

**102**) The 2 types of boot protocols on startup for an interface are:

DHCA

DHCP/Manual

DHCP/Static

**An:** ?

**103**) A recently installed program appears to be malfunctioning. In which directory should you look for logs related to the new program?

**An:** /var/log

**104**) The command “su Alice”

**An:** Allows us to switch to the Alice user

**105**) The Time to Reach indicates the maximum number of IP routers that can route a packet.

**An:** неверно

**106**) What does vipw do?

**An:** Allows modification of users through /etc/users

**107**) How many total bits make up file permissions that include Owner, Group, World?

**An:** 21

**108**) Which command’s output includes the line: Interesting ports on hostname ?

**An:** nmap

**109)** SELinux is Linux implementation of

**An:** MAC

**110)**The follow services should be turned off unless they are used except:

a) init

b) Wireless

c) Bluetooth

d)IPv6

**An: ?**

**1)**

**An:**

**1)**

**An:**

**1)**

**An:**

**1)**

**An:**

**1)**

**An:**

RK-1(midterm) SOS

1. GRUB cannot be utilized with UEFI. True or wrong? False
2. On which system DEFAULT\_RUNLEVEL variable defines…. Ubuntu
3. The firmware bootloader for Sparc systems is called \_ SILO
4. A system administrator wants to make few changes to the CUPS server configuration. Changes should be made in which of the files?

cupsd.conf

1. In GRUB legacy,the grub= directive defines default…. False
2. CUPS stands for:

Common UNIX Printing System

1. The transfer of messages between machines and routing them to the correct

destination is done by the Mail Transfer Agents (MTAs). True

1. /boot/grub/grub.conf t is the real location of the GRUB Legacy configuration file?

True

1. The file which is the main for GRUB2 in the CENTOs system

/boot/grub2/grub.cfg

1. Instead of running ntpd as a daemon, the administrator wants to run it as a background process. Which of the following options should be used?

–n

1. The file which is the main for GRUB 2 on an Ubuntu system is \_

/boot/grub/grub.cfg

1. Which of the following commands will allow you to change the system runlevel, on a system with traditional init? (choose two)

telinit, init

1. Which of the following options, when used with the mailq command, will resend the messages in the queue?

–q

1. What happens if the user sysadmin invokes the mail command interface and there are no unread mail messages?

The message No mail for sysadmin is displayed

1. Which directory is used primarily for storing log messages?

/var/log

1. In the last six months, the administrator had to adjust the hardware clock on three different occasions. He can find information regarding past clock values from

/etc/adjtime

1. The second stage of the boot process is:

The Bootloader (LILO/GRUB) stage

1. In GRUB Legacy, which directive is not typically used after a title directive?

boot

1. A user is replying to a mail message. After typing the response, which of the following key combinations will save and send the message? Ctrl+D
2. The core software component that tells the hardware what actions to take is called the \_ .

Kernel

1. Which is the default runlevel for Debian based Linux systems? 2
2. A user reports to the system administrator that when printing a Japanese web page, he gets junk characters. Which of the following

settings should the system administrator check in the CUPS configuration file?

DefaultLanguage

1. Which of the following commands will set the system time to the same time as the hardware clock?

hwclock –s

1. Which of the following is not a Linux boot system? bootup
2. Which runlevel number defines multi-user with no networking services?

2

1. The fourth stage of the boot process is: The init phase
2. The behavior of the newaliases command is identical to the sendmail –bi command for systems that are using sendmail. True or False?

True

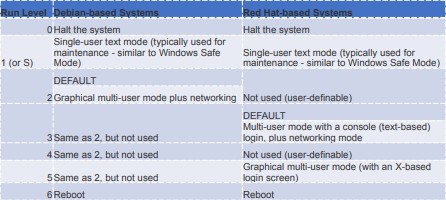
1. Which of the following is not an advantage of GRUB 2 over GRUB Legacy?

Command-line interface

1. SMTP is the standard protocol for communication between email server and mail client.

True or False? False

1. 1 runlevel number defines Start



1. Initramfs

Contains an init script that loads drivers needed for booting the system Is an archive which can be inserted into the kernel during boot

1. A printer’s status cannot be offline just because it has run out of paper.

True or False? False

1. While accessing mail through the mail command interface, a user sees 5 new messages in his mailbox. Since the second message appears important, he would like to read that message first. Which mail command should be used?

2

1. The time before booting the default image is set by GRUB\_TIMEOUT: True or false?

True

1. What run level should be added to the end of the directive line to indicate the run level to load?

Kernel

1. Which of the following functions is NOT provided by the printer service? Economizing use of the printer cartridge
2. Which file is overwritten at the end of each boot process with the messages that were generated while booting?

/var/log/dmesg

1. Characterizes rules,permissions BIOS
2. A user is having trouble accessing the CDROM drive. He wants to send a message to the root user for help. Which of the following commands will create a new message that will be sent to the root user?

mail root

1. Which of the following is not a daemon used for logging? Ilogd
2. Which of the following commands can be used to halt the system? (choose two)

Halt, PowerOFF

1. A essential work of a linux bootloader is:

To load the kernel 43)Systemd uses Targets

1. Which directories exist in the /etc/rc.d directory? d. rc0.d, rc1.d, rc2.d, rc3.d, rc4.d, rc5.d and rc6.d
2. Which of the following can be used to restart the HTTP service? (choose two)

/etc/init.d/httpd restart service httpd restart

1. The two login types are:

CLI and GUI

1. Which file should be edited instead of changing the main conf file for GRUB2

/etc/default/grub

1. . How can you remove a package using an rpm command? rpm –e
2. The location of users’ default shells is stored in the \_\_ file

/etc/passwd

1. You have observed that your organization is not getting any incoming messages. What would be the most likely problem?

Port 25 is not open on the firewall

1. Which of the following changes is NOT possible by modifying various settings in the CUPS configuration file?

Maximum number of printers that can be configured

1. What does a distribution provide to add and remove software from the system? Package manager
2. Which runlevel number is defined as “user-definable”?

# 4

1. Which of the following is NOT a core module of qmail?

qmail-master

1. In Grub Legacy,the boot directive defines an operating system to boot. FALSE
2. Which of the following information is NOT available in the output from the mailq command?

Out time

1. The first process that the kernel launches is called the \_ process. Init
2. Two NTP servers are used by ntpd; one runs Stratum-2 clock while the other uses Stratum-4. Which one is considered to be more accurate?

Stratum-2

1. Mike, a production support engineer, needs to temporarily leave the company on an emergency leave. In his absence Mike wants Francis, another support engineer, to receive the support messages. What should Mike do?

Create .forward file in his home directory and redirect messages

1. Which of the following commands can be used to create an encrypted password that can be used with the password directive in GRUB Legacy: grub-md5-crypt
2. Which of taking arfter considered substitutions for the conventional init process? (choose two)

Upstart

Systemd

1. A mail alias can be created for which of the following? User name
2. Internet Printing Protocol (IPP) is a network protocol that supports which of the following?

Both authentication and access control

1. . In GRUB Legacy, the password directive in the title directive setting means:

To boot a specific operating system, a password must be entered

1. In GRUB Legacy, the password directive in the global setting means: The user must submit the specified password before appending, editing or using the GRUB command line
2. For GRUB Legacy, which of the following is used to specify the second partition of the second hard drive?

(hd1,1)

1. The system clock contains both time and time zone information. True or False?

True

1. . A software release cycle describes:

How often upgrades come out for software

1. Instead of running ntpd as a daemon, the administrator wants to run it as a background process. Which of the following options should be used?

–n

1. By mistake, a user sends a file to print on a remote printer. The best course of action is:

Delete the document if the print document is still in the queue

1. . The reference time that the system time is calculated from is known as:

Epoch time

1. . Deborah created a new alias and added it to the mail alias file. Next, she tried to use the alias through the sendmail command, but the new alias is not working. What is the most likely reason?

File aliases.db was not rebuilt using the newaliases command

1. NTP stands for:

Network Time Protocol

**Рк-2(endterm) Linux OS**

**1)**What does pkill do? Choose the best answer

**An:** Kills a process

**2)** If I can’t ping a website, such as google.com, what might I ping instead t o check for network connectivity:

**An:** The gateway

**3)** The command chage can’t be used to

**An:** Delete a user

**4)** Why would you use sticky bits?

**An: To allow a user to execute as root without elevating privileges**.

**5)** Firewalls do not need to be configured on linux servers because Linux sy stems don’t get viruses.

**An:** неверно

**6)** SeLinux is set to by default on newer versions of Red Hat type ope rating systems

**An:** Enforcing

**7)** The file which used to verify the services indicated within the inetd config uration

**An:** /etc/services

**8)** firewalld is the default firewall in newer versions of Red Hat type operatin g systems

**An: true**

**9)** Which of the following is not a function of the netstat command?

**An:** View the route used by packets to reach a given destination

**10)** Only one network interface can be added in Linux

**An:** неверно

**11)** The system administrator needs to create a transitory client account to be utilized for as it were six days. Promptly after six days, the access follow ing values should be set for the transitory client within the *shadow* file:

**An:** Expire date = today + 6

**12)** A gateway must be added to Linux before connectivity to the network.

**An:** верно

**13)** Some distributions allow software to be installed at main operating syst em installation time

**An:** верно

**14)** Which user information is missing from the *passwd* file record?

**An:** The user’s password

**15)** Using SUDO allows a user to elevate privileges.

**An:** Верно

**16)** The daemon that provides logging services for applications and progra ms is:

**An:** Syslogd

**17)** What port does SSH typically run on

**An:** 22

**18)** Using SElinux can be better at protecting the system because ACL’s ca nnot protect you against everything.

**An:** верно

**19)** Where is the users configuration file located

**An:** /etc/passwd

**20)** How to install ModSecurity on CentOS

**An:** *sudo* yum install mod\_security

|  |  |  |
| --- | --- | --- |
| **21)**How to install ModSecurity on Debian  **An:** *sudo* apt install libapache2-modsecurity | | |
|  |  |  |
| **22)** How to install ModSecurity on Ubuntu  **An:** *sudo* apt-get install libapache2-mod-security2 | | |

**23)** What is the main feature of a super server?

**An: Run as a master process and listen for incoming TCP connection s and then start the required process**

**24)** What attack does Modevasive protect against

**An:** Brute-force

**25)** What is used to partition a network into different logical networks?

**An:** Subnetting

**26)** DOSSiteCount modevasive parameter:

**An:** the total number of requests for the same site by the same IP address

**27)** Linux cannot integrate with Windows Active Directory

**An:** false

**28)** Discretionary access control should be implemented on files as well as directories

**An:** верно

**29)** firewalld is the default firewall on Ubuntu systems

**An:** неверно

**30)** Scripts can be modified to add additional configuration items to a user’s profile.

**An:** верно

**31)** System administrators can use logs for:

**An:** Tuning the system for efficiency or security

**32)** DOSblockingPeriod modevasive parameter :

An: the amount of time an Ip address stays on the blacklist.

**33)** Who can modified the /etc/passwd file?

**An:** Root user

**34**) Which password is required for authentication to use sudo?

**An:** User’s Password

**35)** SELinux can be used to apply least privilege to linux users

**An:** верно

**36)** Which super server has replaced inetd?

**An:** xinetd

**37)** The klogd facility gets the messages from syslod and decides the actio n based on configuration settings. True or False?

**An:** False

**38)** An standart client, Bob has the following record in the /etc/passwd reco rd. What does the x demonstrate? *bob:x:1021:1020:purchase\_dept\_user:/h ome/usr/bob:/bin/bash*

**An:** The encrypted password has been stored in the /etc/shadow file

**39)** Which file stores the encrypted password?

**An:** /etc/shadow

**40)** You have an existing interface eth0 and have now added a new interfa ce eth1. You notice that the count of RX and TX packets is 0 in the output o f ifconfig. What d…

**An:** The eth1 interface is not being used to route network traffic.

**41)** What does the /etc/init.d directory contain?

**An:** Scripts for the different run levels

**42)** eth0 is only name that can be used for a network interface

**An:** неверно

**43)** Which file is used to configure the sudo command?

**An:** /etc/sudoers

1. Which of the following is not a state of ports as reported by nmap?

**An:** Suspended

1. How to install Modevasive on **Debian/Ubuntu An**: sudo apt-get install libapache2-mod-evasive

**46)** How to install Modevasive on **CentOS / RedHat**

**An:** sudo yum install mod\_evasive

**47**) In case the posting of a directory appears certain records with consents set to rwsr-xr-x. What does this demonstrate?

**An:** SUID bit is set for the file

**48)** Adding users must be performed with elevated privleges

**An:** верно

**49)** Whitelisting is

**An:** create a list of permitted entities and blocking everything else

**50**) A password for the root account may be set at installation time

**An:** верно

**51)** Distributions typically display networking information

**An:** верно

**52)** Which command is used to keep track of suspicios connections ?

**An:** netstat

**53**) What does !! signify in the /etc/shadow file

**An:** The account is locked

**54**) What permissions are set for Read, Write and Execute for Owner and r ead for group and world

**An:** 744

**55**) Logs contain a wealth of data and may include all of the following, exce pt:

**An:** Configuration settings

|  |  |  |  |
| --- | --- | --- | --- |
| **56**) You have an existing interface eth0 and have now added a new interfa ce eth1 . | | | |
| You notice that the count of RX and TX |  | packets is 0 in the output of ifconfig |  |

.

**An:** The eth1 interface is not being used to route network traffic

What does this indicate?

**57**) Which is the standard port used for DNS service

**An:** 53

**58**) What is the command that adds users within Linux

**An:** useradd

**59**) ModSecurity configuration file:

An: /etc/apache2/mods-enabled/evasive.conf

**An:** /etc/modsecurity/modesecurity.conf

**60**) Which passwd option use to make the password empty for user Bob

**An:** -d Bob

**61)** The root user can decrypt the password of any user

**An: false**

**62**) Which are the four types of aliases found in the /etc/sudoers file?

**An:** User\_Alias, Host\_Alias, Runas\_Alias, and Cmnd\_Alias

**63**) Which of the following is not a probable reason for the Host unreachabl e error?

**An:** Incorrect username/password used for login

**64)** The following can show commads of running processes, except:

**An:** (ответ, кроме ps, top, pstree)

**65**) If we change file permissions to 777, what does this mean?

**An:** Changes file permissions to read, write, and execute for Owner, Group

, and World

**66)** CentOS is the binary equivalent of Red Hat

**An:** верно

**67**) How is cron used?

**An:** Periodic processing

**68)** Which command can’t be used to update user information in the /etc/pa sswd file?

**An:** Finger

**69**) Can a normal user run privileged commands? Choose the best answer:

1. Yes
2. No
3. No,only root has privileges.
4. Yes, As long as the user has privileges in the sudoers file.

**An:** d

**70**) Arrange the following items in descending order of priority: alert, err, e merg, warning, crit

**An:** emerg, alert, crit, err, warning

**71**) Pay attention to the following record within the passwd file boboc521:52 0.hr\_dept\_user/home/usr/test user/bin/bash UID and GID for bob, respectiv ely:

**An:** 521 and 520

**72**) If you are trying to login to a server and are unable to connect, which c ommand would you use to verify network connectivity?

**An:** ping

**73**) Types of Ip addresses used on the Internet?

**An:** Public and Private

74) SELinux is very easy to manage and troubleshooting is equally easy верно

неверно

**An: false (?)**

75) SSH is an insecure way of accessing other systems.

**An:** неверно

**76**) Deleting a user is accomplished through the command

**An:** userdel

**77**) Both owner and group permissions on a user’s home directory need to be set to the user in order for the user to gain access to their directory

**An:** верно

**78)** What does the command chmod do?

**An:** Changes group permissions

**79**) A users shell cannot be added while adding users from useradd comm and

**An:** false

**80)** What is the command to view interface within Linux

**An:** ifconfig

**81)** The line root ALL=(ALL)ALL indicates that the root user has permissios to run all commands on all systems without a password.

**An:** неверно

**82**) The maximum value of the field in the */etc/shadow* file which is responsi ble for the password expiry period

**An:** 99999

**83**) What is SCP

**An:** Copies files from one system to onother over SSH

**84**) Which class IP addresses can be assigned to network interfaces?

**An:** Class A, B and C

**85**) /etc/passwd can be used to see what users are in the system

**An:** верно

**86**) SELinux has poor logging capabilities

**An:** неверно

**87**) A user’s files still may be left on the system even if you delete the user

**An:** верно

**89**) Should xwindows be used on a server?

**An:** Depends …(самый дл ответ)

**90**) What information is not stored in the /etc/shadow file?

**An:** Encrypted password

**91**) UFW is way that we can use iptables within Ubuntu systems

**An:** верно

**92**) The 3rd octet is used for creating subnets for Class C networks. True or false?

**An:** false

**93**) One of the probable reasons for increased TX collisions count in the ou tput of ifconfig could be \_.

**An:** Network congestion

**94**) Which type of access to the /etc/passwd file has a ordinary user (non root)?

**An:** Read only

**95**) UFW and firewalld are generally easier to configure than iptables

**An:** true

**96**) Zones within firewalld are like in iptables:

**An:** Zones?

**97**) If DoSSiteInterval parameter in modevasive set to 1:

**An:** That means that if a single Ip address requests any resources on the s ame website in a single second be temprorarily blacklisted.

1. UFW is enabled via what command?

**An:** ufw enable

1. What does, sshd: ALL, specified in the hosts.deny file indicate

**An:** Prevent ssh connections from all hosts

**100**) The /etc/sudoers file should be edited using the editor only

**An:** visudo

**101**) DoSSiteInterval modevasive parameter

**An:** this specifies the number of seconds that DOSSiteCount monitors

**102**) The 2 types of boot protocols on startup for an interface are: DHCA

DHCP/Manual

DHCP/Static

**An:** DHCP/Static (либо DHCP/none)

**103**) A recently installed program appears to be malfunctioning. In which dir ectory should you look for logs related to the new program?

**An:** /var/log

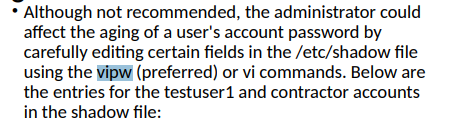
**104**) The command “su Alice”

**An:** Allows us to switch to the Alice user

**105**) The Time to Reach indicates the maximum number of IP routers that can route a packet.

**An:** неверно

P.S.: Time to Live – True; Time to Reach – False!



**106**) What does vipw do?

**An:** Allows modification of users through /etc/users

**107**) How many total bits make up file permissions that include Owner, Gro up, World?

**An:** 21?

Должно быть 9.

**108**) Which command’s output includes the line: Interesting ports on hostna me ?

**An:** nmap

**109)** SELinux is Linux implementation of

**An:** MAC

1. The follow services should be turned off unless they are used except:
2. init
3. Wireless
4. Bluetooth d)IPv6

## An: init

1. Which commands is used to find all files that have the SGID bit set? Ans: find / -type f -perm -2000
2. LAMP is common example of a web service stack, named as an acron ym ….

Ans: Linux/Apache/MySQL/PHP

1. What is the command to search for files with no user? Ans: find / -nouser
2. What loadable kernel module is the basis for the beginning firewalls? Ans: iptables(?)
3. What is a route?

Ans: a route is applied to an interface to tell traffic where to go

1. DOSPageCount modevaisive parameter:

Ans: the number of requests for an individual page that triggers blacklisting.

1. Which file is used for mapping the application services to their respecti ve port numbers?

Ans: /etc/services

1. The simplest way to deny someone access to their account is: Ans: changing their shell to /sbin/nologin
2. Blacklisting is:

Ans: a list of suspicious or malicious entities that should be denied access or ….

1. Which information is not stored in the /etc/shadow file? Ans: default home directory
2. /boot/grub/grub.conf is the real location of the GRUB Legancy configure file. True
3. /etc/group Froup:Password:GID:Users
4. /etc/passwd can be used to see what users are in the system. True
5. /etc/passwd contains password related information for accounts. False
6. \_\_\_\_\_ - Programs, libraries, documentation etc. for all user-related programs. /USR
7. \_\_\_\_\_ : delete the 2nd message in the mailbox. & d 2
8. \_\_\_\_\_ : end the current session. kill
9. \_\_\_\_\_ : list of all available commands. compgen -c
10. \_\_\_\_\_ : reply to the 2nd message in the mailbox. & r 2
11. \_\_\_\_\_ command is used to count the total number of lines, words and character in a file? wc
12. \_\_\_\_\_ command is used to list contents of directories? Ls
13. \_\_\_\_\_ command is used to remove the directory? Rmdir
14. \_\_\_\_\_ is generally faster than \_\_\_\_\_\_\_\_\_ . first fit, best fit
15. \_\_\_\_\_ is the world’s largest non-commercial Linux distribution Debian
16. 1 runlevel number defines Start
17. A binary semaphore is a semaphore with integer values : 1; 0
18. A closed chain of processes exists, such that each process is blocked waiting for a resource circular wait
19. A command can be: (choose three) An alias; A function; A program built-in to the shell
20. A deadlock avoidance algorithm dynamically examines the \_\_\_\_\_, to ensure that a circular wait condition can never exist. resource allocation state
21. A device name of /dev/hda1 indicates this partition is on which type of device? IDE
22. A device name of /dev/sda1 indicates this partition is on which type of device? SATA
23. A essential work of a Linux bootloader is: To load the kernel
24. A file system is a hierarchy of directories and files with the root / directory at the top of the directory tree. True
25. A function accepts 3 arguments as input. The third argument of a function is identified as: $3
26. A gateway must be added to Linux before connectivity to the network. True
27. A GUI is intended to provide users a visual way of issuing commands to the computer through the use of WIMP. The acronym WIMP stands for: Windows, Icons, Menus and Pointers
28. A hardcop y sign-up sheet was used to reserve computer time with Time scheduling
29. A host does not have an entry in either hosts.allow or hosts.deny. How does TCP Wrappers handle a request originating from this host? Request forwarded to the service
30. A line in the syslog.conf file contains \* in the actions part. What does this mean? A message is displayed to everyone who is logged in
31. A Linux administrator modifies the values of UID\_MAX and UID\_MIN parameters in the /etc/login.defs file. This in effect will allow her to: Assign UID within the specified range for new users
32. A Linux server may not be powered-on all the time. Which of the following options is most suitable to run scheduled jobs on this server? anacron
33. A Linux server, configured for the UTC time zone, is accessed by users from other time zones. The cron jobs scheduled on the server will run: As per UTC time zone
34. A Linux system has entries in both the cron.allow and cron.deny files. Which users, other than root, will have access to the crontab command? Users specified in cron.allow have access to crontab ; cron.deny will be ignored
35. A Login BASH shell executes which of the following additional files (compared to an interactive BASH shell)? /etc/profile and either ~/.bash\_profile or ~/.bash\_login or ~/.profile
36. A mail alias can be created for which of the following? User name
37. A memory used to provide a high speed is called? Cache
38. A message was forwarded as per the .forward file found in the user’s home directory. What happens to the original message? Original message gets forwarded, no copy retained
39. A minimum of \_\_\_\_\_ variable(s) is/are required to be shared between processes to solve the critical section problem? Two
40. A monitor is a type of: semaphore
41. A mount point is: An empty directory that is used to access a filesystem
42. A new default gateway has been added using the route add command. Which command can be used to verify if the route has been added correctly? route –n
43. A new environment variable can be “exported” and assigned a value with a single command. True or False? True
44. A new user was created using the command useradd steve . The command grep steve/etc/shadow will show the password field for this account as: !!
45. A normal (non root) user has which type of access to the /etc/passwd file? Read only
46. A normal user, joe has the following record in the /etc/passwd file. What does the x indicate? joe:x:1021:1020:purchase\_dept\_user:/home/usr/joe:/bin/bash The encrypted password has been stored in the /etc/shadow file
47. A one-time job needs to be scheduled for a specific time. Which of the following commands is most suitable for the task? at
48. A page fault? is an access to a page not currently in memory
49. A password for the root account may be set at installation time. True
50. A popular program for monitoring running processes in real-time is: top
51. A primary function of a Linux bootloader is: To load the kernel
52. A printer’s status cannot be offline just because it has run out of paper. True or False? False
53. A problem encountered in multitasking when a process is perpetually denied necessary resources is called: starvation
54. A process can be terminated due to: all of the mentioned
55. A Process Control Block (PCB) doesn’t contain which of the following: bootstrap program
56. A recently installed program appears to be malfunctioning. In which directory should you look for logs related to the new program? /var/log
57. A recently installed program appears to be malfunctioning. In which directory should you look for logs related to the new program? /var/log
58. A regular user wants a password that never expires. The Maximum field value in the /etc/shadow file should be set to: 99999
59. A relationship between processes such that each has some part (critical section) which must not be executed while the critical section of another is being executed, is known as? Mutual exclusion
60. A section of code within a process that requires access to shared resources and that must not be executed while another operation is in a corresponding section of code is called: Critical section
61. A sequence of instructions, in a computer language, to get the desired result, is known as? Program
62. A sequence of one or more statements that appear to be indivisible is: Atomic operation
63. A server sends 2000 bytes of data but the client receives only 1200 bytes. The server continues sending data, though some packets are lost intermittently. This pattern indicates: UDP
64. A set of processes is deadlock if: each process is blocked and will remain so forever
65. A signal is: A technique to tell a process to take some sort of action
66. A single thread of control allows the process to perform: only one task at a time
67. A situation where several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in which access takes place is called: Race section
68. A soft link is also called a \_\_\_\_\_ link. symbolic
69. A software application that is dependent on both hardware and system clocks is failing. A possible reason could be: System clock and hardware clocks are out of sync
70. A software release cycle describes: How often the software’s memory is released back to the operating system
71. A solution to the problem of external fragmentation is: compaction
72. A state is safe, if: the system can allocate resources to each process in some order and still avoid deadlock
73. A system administrator needs to find out the number of copies of a confidential document printed by a particular user. Which of the following log files should he view for the information? page\_log
74. A system administrator wants to make few changes to the CUPS server configuration. Changes should be made in which of the files? cupsd.conf
75. A system clock generates interrupts at a rate of approximately one every 0.2 seconds. At each clock interrupt, the OS regained control and could assign the processor to another user. This technique is known as Time slicing
76. A system is in the safe state if: the system can allocate resources to each process in some order and still avoid a deadlock; there exist a safe sequence
77. A system that contains Linux as well as a Microsoft Windows operating system is called a: Dual boot system
78. A task in a blocked state is waiting for same temporarily unavailable resources
79. A user has written a few scripts for private use. Which of the following commands should be used so that no one else has execute permission? chmod u+x script\_file chmod
80. A user is a member of three different secondary groups. Which file will contain information regarding his membership in these secondary groups? /etc/group
81. A user is accessing mail through the mail command interface. The command delete 3 will delete the 2nd mail message because mail messages are counted starting with 0 instead of 1. True or False? False
82. A user is having trouble accessing the CDROM drive. He wants to send a message to the root user for help. Which of the following commands will create a new message that will be sent to the root user? mail root
83. A user is replying to a mail message. After typing the response, which of the following key combinations will save and send the message? Ctrl+D
84. A user jamie already exists in the system. The command grep jamie /etc/passwd displays one user record. Running the echo $? command immediately after the grep command would result in what output? 0
85. A user reports to the system administrator that when printing a Japanese web page, he gets junk characters. Which of the following settings should the system administrator check in the CUPS configuration file? DefaultLanguage
86. A user wants an email sent when his shell script is executed successfully. Which of the following commands in the script can do this? mail brad
87. A user wants to execute a script called test1\_script. What type of permission does she need on the test1\_script file? Read and execute
88. A user wants to perform key combinations such as Ctrl+C without needing to hold both keys at once. He should enable: Sticky Keys
89. A user`s files still may be left on the system even if you delete the user. True
90. A users shell cannot be added while adding users from useradd command. True
91. A variable once declared cannot be deleted. True or False? False
92. Accessibility within a GUI environment can be improved by which of the following? Screen magnifier; Automatic clicking; Text-to-speech screen reader
93. Adding users must be performed with elevated privileged. True
94. Administrators use the \_\_\_\_\_ file to create key environment variables and set key system values for every user. /etc/profile
95. Adopting a static policy that disallows one of the four conditions above. Prevention
96. After executing the atq command, the following jobs are displayed: 2 2014-11-22 22:00 a test\_user 3 2014-11-22 20:00 a root 4 2014-11-22 22:45 a oracle\_dba Which of the following commands will delete job #2? atrm 2
97. After running fdisk -cu /dev/sdb , what fdisk command will allow you to list the current partition table? p
98. After running fdisk -cu /dev/sdb , what fdisk command will allow you to change a partition type? t
99. After running fdisk -cu /dev/sdb , what fdisk command will allow you to create a new partition? n
100. After running fdisk -cu /dev/sdb , what fdisk command will allow you to delete a partition? d
101. After running fdisk -cu /dev/sdb , what fdisk command will allow you to quit without saving changes? q
102. After running fdisk -cu /dev/sdb , what fdisk command will allow you to save changes and quit? w
103. All commands that are run from system crontabs require root privileges. True or False? False
104. All RPM package management commands must be run as the root user. True or False? True
105. Altering the GRUB2 step is fulfilled by: editing the /etc/default/grub file with vi
106. Amount of time the hardware clock gains or loses on a regular rate is known as: Clock drift
107. An absolute path always starts with which character? /
108. An account on a Linux system has a UID of 50. Which type of account is this? System account
109. An application programs is developed by the Application programmer
110. An ideal place for a regular user (not a super user), to place their shell scripts would be: /home/john/bin
111. An standart client, Bob has the following record in the /etc/passwd record. What does the x demonstrate? bob:x:1021:1020:purchase\_dept\_user:/home/usr/bob:/bin/bash: The encrypted password has been stored in the /etc/shadow file
112. An un-interruptible unit is known as: atomic
113. Any program, no matter how small, will occupy an entire partition results in? internal fragmentation
114. Arrange the following items in increasing order of priority: alert, err, emerg, warning, crit warning, err, crit, alert, emerg
115. ASCII is not a subset of UTF-8. True or False? False
116. Assuming at least one file matching the pattern is in the current directory, the command echo ???a will display: All of the files in the current directory that have four characters in the file name with the last character being an “a” character.
117. Assuming everyone has access to the directory the file is in, who can view the contents of a file with permissions of rw-r—-x? Both the user owner and group owners
118. At the beginning of each instruction cycle, the processor fetches an instruction from the memory. The address of the instruction is held in PC
119. Banker's algorithm for resource allocation deals with: deadlock avoidance
120. Bash is: a shell
121. Batch commands are executed only when the system’s load average drops below which of the following by default? 0.8
122. Batch operating systems were used (years) From the mid-1950 to early 1960s
123. Blacklisting is: a list of suspicious or malicious entities that should be denied access or ….
124. Block size is: The unit of data exchanged between cache and main memory; Larger block size yields more hits until probability of using newly fetched data becomes less than the probability of reusing data that have to be moved out of cache; (How much data should be transferred from main memory to cache)
125. Both owner and group permissions on a user`s home directory need to be set to the user in order for the user to gain access to their directory. True
126. Both the lsof and the netstat command can be used to find the list of processes and the ports they are listening to. True or False? True
127. By default a variable is … Global
128. By default, a regular expression is case sensitive. True
129. By default, tar will attempt to extract an archive… into the working directory.
130. By default, the df command displays filesystem use in: 1-K block size
131. By default, the edquota command will use which editor? vi
132. By default, using the touch command on an existing file will update the file’s \_\_\_\_\_. Timestamp
133. By default, what does the cp command preserve from the original file? The contents
134. By mistake, a user sends a file to print on a remote printer. The best course of action is: Delete the document if the print document is still in the queue
135. By modifying the UseTheme and GreetString keys in the /etc/kde/kdm/kdmrc file, an administrator can change the banner for the kdm display manager. True or False? True
136. bzip2 archives are typically indicated with which file extension? .bz2
137. Cache Design has these properties? Size, block size, mapping function, replacement algorithm, write policy
138. Can a normal user run privileged commands? Choose the best answer. Yes. As long as the user privileged in the sudoers file.
139. CentOS is the binary equivalent of Red Hat: True
140. Changes in the /etc/skel directory will apply to: New users created using useradd command
141. Changes in the \_\_\_\_\_ initialization file will affect all the users on the system. Global
142. Character encoding is the process of maintaining the mapping between the character and its \_\_\_\_\_ value. Internal
143. Characterizes rules and permissions BIOS
144. Choose main functions of Linux kernel? Filesystem management, Hardware management, System memory management, Software program
145. Choose the correct definition for daemons. start at system startup; is a background process
146. Choose the correct form of /etc/gshadow Name:Password:Admins:Users
147. Choose the correct form of /etc/passwd name:password:UID:group\_number:comment:directory:start\_program
148. Choose the property of OS? Timesharing Spooling
149. Choose the storage management responsibility for "Many application programs require means for storing information for extended periods of time, after the computer has been powered down" Long-term storage
150. Choose the storage management responsibility for "Programmers should be able to define program modules, and to create, destroy, and alter the size of modules dynamically" Support of modular programming
151. Choose the storage management responsibility for "The OS can achieve efficiency by assigning memory to jobs only as needed" Automatic allocation and management
152. Choose the storage management responsibility for "The OS must allow portions of memory to be accessible in various ways by various users" Protection and access control
153. Choose the storage management responsibility for "The OS must prevent independent processes from interfering with each other's memory, both data and instructions" Process isolation
154. 'Circular wait' condition for deadlock is defined as Each process holds resource needed by next process in chain
155. Command substitution allows us to take the output of a command or program (what would normally be printed to the screen) and save it to the file. True
156. Command substitution can be used to insert the output of a command as another command’s argument. True or False? True
157. Commands specified in a crontab file will run only if the root user is logged in. True or False? False
158. Complete the relationship concerning the memory systems: faster access time – greater cost per bit
159. Complete the relationship concerning the memory systems: greater capacity slower access time
160. Conditional statements CANNOT be used to determine which of the following? System runlevel
161. Consider the following value of PATH variable: /bin:/usr/local/sbin:/home/joe/bin:/home/joe/test Joe modifies the my\_scr.sh script, which is stored in the directory /home/joe/bin then places a copy of my\_scr.sh in /home/joe/test. Executing my\_scr.sh will: Run the original version of the script in the /home/joe/bin directory
162. Convert this number systems: BIN(10101010101) to DEC? 1365
163. Convert this number systems: BIN(1100001100) to DEC? 780
164. Convert this number systems: BIN(1111000111) to DEC? 967
165. CPU fetches the instruction from memory according to the value of? program counter
166. Crontab are running currently? sudo crontab –l
167. Crontab is used to schedule commands to be executed only once. False
168. CUPS can only be administered by: Root User and members of the group specified in the SystemGroup directive
169. CUPS retains the print job in the queue even after it is printed. True or False? False
170. CUPS stands for: Common UNIX Printing System
171. Data manipulation statements cannot be used for: Defining tables and views Viewing
172. Deadlock inevitable region can be referred to as a fatal region
173. Deborah created a new alias and added it to the mail alias file. Next, she tried to use the alias through the sendmail command, but the new alias is not working. What is the most likely reason? File aliases.db was not rebuilt using the newaliases command
174. Define a Boolean algebra: process that applies binary logic to yield binary results
175. Define class A: large organizations, governments
176. Define class B large organization, governments
177. Define class C: large organizations, governments
178. Defining the PS1 variable in an initialization file will make changes to the prompt persistent between logins. True or False? True
179. Different software programs are designed for different operating systems, and most of them will not work on systems that they weren't designed for. With which following programs we can run Windows applications in Linux OS? Wine, Winetricks, Play on Linux, Crossover
180. Discretionary access control should be implemented on files as well as directories: True
181. Distribution A complete Linux system package is called a distribution.
182. Distributions typically display networking information: True
183. DOSBlockinkPeriod modevasive parameter: The amount of the time an ip address stays on the blacklist
184. DOSPageCount modevasive parameter: the number of requests for an individual page that blacklisting.
185. DoSSiteInterval modevasive parameter: this specifies the number of seconds that DOSSiteCount monitors
186. Each line in syslog.conf must specify: Action; Selector facility; Selector priority
187. 'Ease of evolution of an OS' corresponds to the following objective: Ability to evolve
188. Enter the name of file that contains the user accoutn information for your system. /etc/passwd
189. Environment variables are: Passed into other shells and commands
190. Environment variables can be viewed by running: (choose two) export –p; env
191. Environment variables cannot be declared by which command? set
192. Errors relating scheduled cron jobs can be found at which of the following locations? /var/log/cron.log
193. eth0 is only name that can be used for a network interface. False
194. Every address generated by the CPU is divided into two parts: page number; page offset
195. Every print job stored in the /var/spool/cups directory has: One control file and one or more data files
196. External fragmentation exists when: enough total memory exists to satisfy a request but it is not contiguous
197. External fragmentation will not occur when: no matter which algorithm is used, it will always occur
198. Files with the SUID/SGID bit set can be used to access the resources of the system that are otherwise inaccessible to the user. True or False? True
199. firewalld is the default firewall in newer versions of Red Hat type operating systems. True
200. firewalld is the default firewall on Ubuntu systems. False
201. Firewalls do not need to be configured on linux servers because Linux systems don’t get viruses. False
202. Fixed-length block of data in secondary memory is called \_\_\_\_\_: pages
203. For configuring inetd, the files \_\_\_\_\_ are used: /etc/inetd.conf or separate files for each service in the /etc/inetd.d directory
204. For each process OS creates and manages: Process control block
205. For every process there is a \_\_\_\_\_. page table
206. For GRUB Legacy, which of the following is used to specify the second partition of the second hard drive? (hd1,1)
207. For locally run programs, the locale information is provided by system variables. True or False? False
208. For non-sharable resources like a printer, mutual exclusion: must exist
209. For rwxr-x–x permission set, the bolded permissions belong to: All users besides the user owner and group owner
210. For the rwxr-x–x permission set, the bolded permissions belong to: The user owner of the file or The group owner of the file
211. For traditional init, the \_\_\_\_\_ file is where the initial default runlevel is defined. /etc/inittab
212. Foreground processes doesn't expect user input. False
213. Four necessary conditions for deadlock to exist are: mutual exclusion, no-preemption, circular wait and hold and wait
214. Freeware is free software, software that the licensee can use without paying a license fee.
215. FTP encrypts the user name and password entered by the user to log in. True or False? False
216. Given an IP address 10.11.15.8, the host ID derived from it is: 11.15.8
217. GRUB cannot be utilized with UEFI. True or wrong? False
218. gzip and bzip are aliases for the same utility. True or False? False
219. gzip and bzip2 use the same compression algorithm. True or False? False
220. HALD is the abbreviation for: Hardware Abstraction Layer Daemon
221. Hold and wait' condition for deadlock is defined as Process holds a resource while awaiting for other resource
222. How can both hard and soft limits be se together in the /etc/security/limits.conf file? By specifying the type as –
223. How can we list directories with hidden files? ls –a
224. How can we list particular directories? ls -d
225. How can we make regular expression case insensitive? By starting the pattern with "(?i)"
226. How can you add **read and execute**permission to owner for file quiz.txt chmod u+rx quiz.txt
227. How can you determine the Debian package that owns a file? dpkg -S
228. How can you determine the RPM package that owns a file? yum provides
229. How can you list all available signals? kill –l
230. How can you remove a package but not its configuration files with Debian package management? apt-get remove
231. How can you remove a package using an rpm command? rpm -e
232. How can you use quotas to limit the number of files a user can create? By setting an inode limit
233. How does begin bash script? #!/bin/bash
234. How is cron used? Periodic Processing
235. How is the default run level defined? Initdefault id:3:initdefault:
236. How is the DNS configuration file /etc/resolv.conf setup? By network initialization scripts
237. How is the kernel package special for package management? New versions should be installed instead of upgraded
238. How is the locale set for web applications? Obtained from the web browser
239. How many approaches of mutex implementation 3
240. How many basic ways to deal with arithmetic in Bash are there? 3
241. How many bits character encoding is supported by ISO? 8-bit
242. How many built-in-rules do iptables have? 3
243. How many categories of Linux distribution? 3
244. How many layers have ISO/OSI Network Model? 7
245. How many parts of Memory Hierarchy? 3
246. How many principles have Deadlock? 3
247. How many recovery algorithms? 4
248. How many times can you use a \* glob character in a pattern? No limit
249. How many total bits make up file permissions that include Owner, Group, World? 9
250. How to install Modevasive on CentOS? sudo yum install mod\_evasive
251. How to install Modevasive on Debian? sudo apt-get install libapache2-mod-evasive
252. How to install ModSecurity on CentOS? sudo yum install mod\_security
253. How to install ModSecurity on Debian? sudo apt install libapache2-modsecurity
254. How to install ModSecurity on Ubuntu? sudo apt-get install libapache2-mod-security2
255. How to see the permission settings for a file? Ls –l
256. How to solve problem of "external" fragmentation? Compaction
257. How to solve problem of equal-size partitions? swapping (?) ----- page 318 book; unequal-size partitions
258. How to switch to the root user? su
259. How to test the alias by emailing? mail alterego < /etc/aliases
260. How would you schedule a cron job to run every second? Using a cron job, it is not possible to schedule a job which runs every second
261. How you list only hidden files? ls –la | grep "^."
262. Identify the correct command to view the status of all printers: lpq –a
263. Identify the correct Data Definition statement from the list below: CREATE TABLE
264. Identify the invalid syslog.conf selector facility: batch
265. If a file has permissions that appear as rwxr-x—, what is the octal permission mode of the file? 750
266. If a library is not accessible due to an error, the the ldd would report which error message? not found
267. If a page number is not found in the TLB, then it is known as a: TLB miss
268. If a page table entry is not in main memory, then it is known as a: page fault
269. If a page table entry is present in the TLB, then it is known as a: TLB hit
270. If a process is executing in its critical section, then no other processes can be executing in their critical section. This condition is called mutual exclusion
271. If a user has exceeded the block soft quota and the grace period has expired, what happens? The soft limit becomes a hard limit until the user goes below the soft limit again
272. If DOSSiteInterval parameter in modevasive set to 1: That means that if single IP address requests any resources on the same website in a single second be temprorarily blacklisted
273. If I can’t ping a website, such as google.com, what might I ping instead to check for network connectivity: The gateway
274. If no desktop environment is installed, which of the following display managers is likely to be used? xdm
275. If process accounting is turned on, then the amount of log messages generated will be very low. True or False? False
276. If the \_\_\_\_\_ file exists, then filesystem checks are forced during the boot process. /forcefsck
277. If the accessed word is found in the faster memory, that is defined as a: hit
278. If the accessed word is not found in the faster memory, that is defined as a: miss
279. If the command HISTIGNORE=’ls\*’ is placed in the ~/.bash\_profile file, which of the following commands would not be placed in the history list? ls –la
280. If the command you used to unmount a partition fails, which commands can you use to check what is keeping the partition busy? (choose two) lsof; fuser
281. If the contents of a block in the cache are altered, then it is needed to save it back to main memory before replacing it. This is called: write policy
282. If there no interrupts, after each write operation, the processor must: Load new PC value
283. If we change file permissions to 777, what does this mean? Changes file permissions to read, write, and execute for Owner, Group, and World
284. If we want the variable to be available to the other scripts, which command do we need? export
285. If you are in the vi command mode and want to add a new line before your cursor, you can type: O
286. If you are in the vi command mode and want to begin inserting text before your cursor, you can type: i
287. If you are in vi command mode and want to add a new line after your cursor, you can type: o
288. If you are in vi command mode and want to begin inserting text at the end of the line, you can type: A
289. If you are trying to login to a server and are unable to connect, which command would you use to verify network connectivity? ping
290. If you have 5 hard linked files and you delete four of them including the original one, then: The data is still available from the remaining file
291. If you have a file named /tmp/hosts pointing to a file named /etc/hosts and the /etc/hosts file is deleted, then which of the following statements is true? The /tmp/hosts file now points to nothing
292. If you use the -f option when performing an rpm query: The command will show the package that owns a file.
293. If you want a background process to keep running after log out, you can use: nohup
294. If you want a file to be displayed with its lines numbered, you can use: nl
295. If you want to append a file with the normal output of a command, you can use: >>
296. If you want to break apart a large file into smaller files, you can use: split
297. If you want to create a Fourth Extended Filesystem on a partition, which commands could you use? (choose two) mke2fs; mkfs
298. If you want to delete a variable, you can run: unset
299. If you want to enable or disable the enforcement of quotas, as administrator you can use \_\_\_\_\_ and \_\_\_\_\_. (choose two) quotaon; quotaoff
300. If you want to extract fields from a file, you can use: cut
301. If you want to FTP a zip file from your computer to the server, which mode will you use for file transfer? Binary
302. If you want to initialize swap space that you’ve just created, which command would you run? mkswap
303. If you want to move a character to the left in vi command mode, you can press the left arrow key or: h
304. If you want to move a character to the right in vi command mode, you can press the right arrow key or: l
305. If you want to move down a line in vi command mode, you can press the down arrow key or: J
306. If you want to move up a line in vi command mode, you can press the up arrow key or: k
307. If you want to overwrite a file by redirecting the output of a command, you can use: >
308. If you want to quit the vi program without saving any of the changes you made to your file, you can type in command mode: :q!
309. If you want to see the entire contents of a text file, you can use the \_\_\_\_\_ command: cat
310. If you want to set the maximum line width for a text file, you can use: fmt
311. If you want to unmount a partition, which command should you use? umount
312. If you want to use grep without regard to the capitalization of text, you can use the option: -i
313. If you you have a RPM package file named, figlet-1.1-0.3.i686.rpm, which rpm commands will install it? (choose two) rpm -U figlet-1.1-0.3.i686.rpm; rpm -i figlet-1.1-0.3.i686.rpm
314. In a centralized syslog logging setup, remote hosts must be configured to send messages. Which of the following would be the correct setting to send all messages for the “warning” services to the machine with the hostname rsyslogserver? \*.warning @rsyslogserver
315. In a multi-programming environment: more than one process resides in the memory
316. In a RedHat-derived installation, the system administrator notices the following line in the /etc/inittab file:id:3:initdefault:Will the installed display manager start automatically during the boot process? No
317. In ACCEPT target the packet its handed over to the end application or the operationg system for processing True
318. In case the posting of a directory appears certain records with consents set to rwsr-xr-x. What does this demonstrate? SUID bit is set for the file
319. In Class A an IP address starts with 0
320. In Class C the network prefix is 24 bits long
321. In contiguous memory allocation: each process is contained in a single contiguous section of memory
322. In Debian-derived systems, the /etc/sysconfig/syslog file is not used to configure syslog. Instead, the /etc/init.d/syslogd script is edited directly to set the SYSLOGD variable. True or False? True
323. In fixed sized partition, the degree of multiprogramming is bounded by \_\_\_\_\_. the number of partitions
324. In GNOME desktop, which of the following CANNOT be set using Keyboard Accessibility Settings? Magnifier keys
325. In GRUB Legacy, the \_\_\_\_\_ directive defines an operating system to boot. title
326. In GRUB Legacy, the \_\_\_\_\_ directive defines the default operating system to boot. default=
327. In GRUB Legacy, the \_\_\_\_\_ directive indicates an operating system to boot if the default operating system fails to boot. fallback=
328. In GRUB Legacy, the \_\_\_\_\_ directive indicates how long to wait before automatically booting the default operating system. timeout=
329. In GRUB Legacy, the \_\_\_\_\_ directive prevents GRUB from displaying all but the default bootable title until the user presses a key. hiddenmenu
330. In GRUB Legacy, the boot directive defines an operating system to boot. False
331. In GRUB Legacy, the grub= directive defines the default operating system to boot. False
332. In GRUB Legacy, the password directive in the global setting means: The user must submit the specified password before appending, editing or using the GRUB command line.
333. In GRUB Legacy, the password directive in the title directive setting means: To boot a specific operating system, a password must be entered
334. In GRUB Legacy, which directive is not typically used after a title directive? boot
335. In indirect communication between processes P and Q: there is a mailbox to help communication between P and Q
336. In internal fragmentation, memory is internal to a partition and: is not being used
337. In Memory Hierarchy, at the inboard memory which of the following are included: Main memory
338. In Memory Hierarchy, at the off-line storage which of the following are included: Cache
339. In Memory Hierarchy, at the Outboard storage which of the following are included: Magnetic disk
340. In memory systems, boundary registers? track the beginning and ending of programs
341. In operating system security and protection, authenticity: Concerned with the proper verification of the identity of users and the validity of messages or data
342. In operating system security and protection, availability is: Concerned with protecting the system against interruption
343. In operating system security and protection, confidentiality is: Assuring that users cannot read data for which access is unauthorized
344. In operating system security and protection, data integrity is: Protection of data from unauthorized modification
345. In operating system, each process has its own: all of the mentioned
346. In order for the installed display manager to start automatically during the boot process, the default run level for Debian-derived distributions should be: Between 2 and 5
347. In order to run a command called “tough” in the background, you would type: tough&
348. In segmentation, each address is specified by (choose two): a segment number; an offset
349. In shell scripts, the conditional statement if must always end with: fi
350. In the /etc/shadow file, a user record has !! as the first two characters in the encrypted password field. What does this signify? The account is locked
351. In the blocking send, blocking receive: both sender and receiver are blocked until message is delivered
352. In the case of a many-to-many relationship between two tables, a third table is not required to simplify the situation into two separate one-to-many relationships.True or False? False
353. In the last six months, the administrator had to adjust the hardware clock on three different occasions. He can find information regarding past clock values from which file? /etc/adjtime
354. In the non-blocking send, blocking receive: sender continues on, receiver is blocked until the requested message arrives
355. In the non-blocking send, non-blocking receive: the sending process sends the message and resumes operation
356. In the non-blocking send: the sending process sends the message and resumes operation
357. In the PATH variable, the \_\_\_\_\_ character is used to separate the directories. :
358. In the Screen section of the /etc/X11/xorg.conf file, the DefaultDepth is set to 16. This means: 65536 colors can be displayed
359. In the time fields of a crontab file entry, a \_\_\_\_\_is used to denote a range of values. –
360. In what directory are you most likely to find user’s home directories? /home
361. In what directory are yum repository configuration files stored? /etc/yum.repos.d
362. In which directory are “missing” files placed by the fsck utility? lost+found
363. In which directory are you most likely to find software from third-party publishers? /opt
364. In which file are mount options placed to support disk quotas? /etc/fstab
365. In which file are repositories stored for Debian package management? /etc/apt/sources.list
366. In which file the default parameters for new user are stored? /etc/login.defs
367. Index register, segment register, and stack register are example of: Address register
368. initramfs: (choose two) Contains an init script that loads drivers needed for booting the system; Is an archive which can be inserted into the kernel during boot.
369. Inodes are used to store a file’s: Metadata
370. Input the number equivalent of rw-r-x--x permission. 651
371. Instead of modifying the primary configuration file for GRUB2, you should edit the \_\_\_\_\_ file. /etc/default/grub
372. Instead of running ntpd as a daemon, the administrator wants to run it as a background process. Which of the following options should be used? –n
373. Instead of specifying the current directory, it is better to place the script in a location that is included in the \_\_\_\_\_ variable. PATH
374. Instead of using a normal keyboard, a user would like to use the mouse for typing text. He should implement: On-screen keyboard
375. Instead of using traditional runlevels, Systemd uses: Targets
376. Internet Printing Protocol (IPP) is a network protocol that supports which of the following? Both authentication and access control
377. Interprocess communication allows: allows process to synchronize activity
378. Interprocess communication: allows processes to communicate and synchronize their actions without using the same address space
379. Interrupts cannot be shared between devices.True or False? False
380. Into how many classes divided the addredd space in classful addressing? 5
381. Involves making dynamic choices that guarantee prevention Avoidance
382. Involves recognizing when deadlock has occurred, and trying to recover Detection and recovery
383. IPv6 addresses are based on \_\_\_\_\_: 128 bits
384. It is not possible to recursively compress files within directories with gzip. True or False? False
385. It is possible to specify the address of a subnet in the hosts.allow and hosts.deny files. True or False? True
386. It is risky to use a DELETE statement without a WHERE clause because: It will remove all the records in the table
387. Jackie wants to run sendmail as a daemon in the background. Which of the following options should she use with sendmail? –bd
388. Job control language was used In early 1960s used to provide instructions to the monitor
389. LAMP is common example of a web service stack, named as an acronym …. Linux/Apache/MySQL/PHP
390. Linux bootloaders? (choose two) GRUB; LILO
391. Linux cannot integrate with Windows Active Directory. False
392. Linux systems keep time in \_\_\_\_\_. UTC
393. Linux was Developed by Linus Torvald
394. List directories recursively,delete,copy ls –R, rm –R, cp –R
395. List directories with detailed info ls –l
396. List directories with hidden files ls –a
397. List particular directories? ls –d
398. Listing the sequence of instructions that are executed is called? Trace
399. Local initialization files, by default, are stored in which directory? User’s home directory
400. Local variables are: Only available to the shell they are created in
401. Logs contain a wealth of data and may include all of the following, except: Configuration settings
402. Long command options are preceded by which two characters? —
403. 'Lost signals, duplicate signals received'. This is Improper synchronization
404. Main memory is broken into fixed-sized blocks called \_\_\_\_\_: frames
405. Many commands that read text files will also read from this stream: stdin
406. Memory is: is the device where information stored
407. Message passing system allows processes to: communicate with one another without resorting to shared data
408. Mike, a production support engineer, needs to temporarily leave the company on an emergency leave. In his absence Mike wants Francis, another support engineer, to receive the support messages. What should Mike do? Create .forward file in his home directory and redirect messages
409. Mint is one of the original Linux distributions sets, popular with Linux geeks. False
410. Missing files don’t have their original file names, instead they are named with their \_\_\_\_\_ number? inode
411. ModSecurity configuration file: /etc/modsecurity.conf
412. ModSecurity is: Plug in module for monitor web traffic
413. Most I/O devices are: much slower than the processor
414. Most of the Linux commands used by regular users can be found in which directory? /usr/bin
415. Much of the work in security and protection as it relates to operating sustems can be roughly grouped into four categories? Availability, confidentiality, data integrity, authenticity
416. Mutual exclusion can be provided by the: both
417. 'Mutual exclusion' condition for deadlock is defined as Only one process may use a resource at a time
418. Mutual exclusion means that? if a process is executing in its critical section, then no other process must be executing in their critical sections
419. 'No preemption' condition for deadlock is defined as No resource can be forcibly removed from process holding it
420. NTP stands for: Network Time Protocol New
421. oldplug devices are devices that are connected when the power is off.True or False? True
422. On a Red Hat-derived Linux distribution, the /etc/sysconfig/desktop file contains the following entries:DESKTOP=”GNOME”DISPLAYMANAGER=”KDM”Which of the following is true? KDM display manager will be used with GNOME desktop
423. On a Red Hat-derived system, the SYSLOGD\_OPTIONS variable in the /etc/sysconfig/syslog file is set to –m 0. This setting: Disables DNS lookups
424. On a Ubuntu system, what variable defines the default runlevel in the /etc/init/rc-sysinit.conf file? DEFAULT\_RUNLEVEL
425. On a which system DEFAULT\_RUNLEVEL variable defines the default runlevel in the /etc/init/rc-sysinit.conf file? Ubuntu
426. On all instruction cycles, the processor accesses memory at least once, to: to fetch the instruction, and often one or more additional times, to fetch operands and/or store results.
427. On the 19th day of every month? Note: in weekday field means that no matter which weekday. 20 11 19 \* ? backup.sh
428. Once installed, it is not possible to switch from one display manager to another.True or False? False
429. One account has elevated privileges to issue any command, access any file, and peform every function.  Root, root, superuser, Superuser
430. One employee can work on multiple projects. Similarly, a project can have more than one employee assigned to it. This is an example of a: Many-to-many relationship
431. One of the NICs on the server corresponding to eth1 has a hardware issue and needs to be removed. It is NOT necessary to restart the network service for this. True or False? False
432. One of the probable reasons for an increased TX collisions count in the output of ifconfig could be \_\_\_\_\_. Network congestion
433. Only 5 out of 100 Linux users in ABCajun Corp need access to crontab . The administrator should: Create cron.allow and add those five users to the file
434. Only one network interface can be added in Linux. False
435. Open source is computer software with its source code made available with; a license in which the copyright holder provides the rights to study, change, and distribute the software to anyone and for any purpose.
436. Open source is free software, software that the licensee can use without paying a license fee. False
437. Operating System maintains the page table for: each process
438. Option stores user accounts in the /etc/passwd
439. Orca is currently set to use the Laptop keyboard layout. Which of the following keys will be designated as the Orca key? Caps Lock
440. Out of the following which can place in home directory? [cd](javascript:void(0);)
441. Paging suffers from external fragmentation? True
442. PAM is used to streamline removing accounts. False
443. PAM wants to schedule a one-time task using the at command and receive an email once it is complete. Which of the following at command options should she use? –m
444. Part of a program where the shared memory is accessed and which should be executed invisibly, is called: critical section
445. PATH variable directories are searched \_\_\_\_\_ when executing a command. Left to right
446. Pay attention to the following record within the passwd file boboc521:520.hr\_dept\_user/home/usr/test user/bin/bash UID and GID for bob, respectively: 521 and 520
447. Perform a set of commands while a condition is true \_\_\_\_\_? While do done
448. Permanent blocking of a set of processes that either compete for Deadlock
449. Placing an \_\_\_\_\_ character at the end of the command line will put the command in the background. &
450. postfix has several advantages over sendmail . Which of the following is NOT an advantage associated with postfix ? Single executable
451. Process is a unit of activity characterized by execution of a sequence of instructions, a current state, and an associated set; A program in execution
452. Processes “communicate” via global counters that are initialized to a positive semaphore
453. Processor is: is a device that performs a sequence of operations specified by instructions in memory
454. Program always deals with: logical address
455. Program is: is a sequence of the instructions
456. Program which to notify the user of a low battery on a Linux laptop computer. acpid
457. Question 10The SSH and GnuPG keys can be protected by an optional passphrase. True or False? True
458. RDBMS stands for: Relational Database Management System
459. Records represent a group of information about an object. Records are represented as \_\_\_\_\_ in a database table. Rows
460. Refer to following cron job entry:0 9-18 \* \* \* /home/joe/bin/check-db-statusThe job… Executes check-db-status on all days between 9 AM and 6 PM
461. Refer to following record in the passwd file: test\_user:x:521:520:hr\_dept\_user:/home/usr/test\_user:/bin/bash UID and GID for test\_user are, respectively: 521 and 520
462. Refer to following section from the CUPS configuration file and identify the correct statement. Allow access to all hosts in the gsource.com domain, but exclude those that are in the uk.gsource.com subdomain
463. Refer to the following SQL statement and identify the type of query: SELECT \* FROM Projects WHERE ProjectID IN (SELECT ProjectID FROM PeopleProjects); Sub query
464. Regular users can modify their GECOS information using which of the following commands? set
465. REJECT target works like the DROP target, but doesn't return an error message. False
466. Remote Procedure Calls (RPC) are used: for communication between two processes on separate systems
467. Rob has to schedule a job to accomplish a one-time task. He wants to run the job during off-peak hours only. Which of the following is most suitable to schedule this task? batch
468. route –n
469. Running the command useradd ben on a system with User Private Groups will create: A user ben and a group ben both are created
470. Runtime mapping from virtual to physical address is done by? memory management unit
471. Scripts can be modified to add additional configuration items to a user`s profile. True
472. Segmentation suffers from external fragmentation? True
473. Select an example of free software? uTorrent, Google Chrome
474. Select chains for NAT table. OUTPUT; PREROUTING; POSTROUTING
475. Select chains for **filter**table. INPUT; FORWARD; OUTPUT
476. Select chains for **mangle** table. POSTROUTING; PREROUTING; INPUT; OUTPUT; FORWARD
477. Select the function that the tr command cannot perform: Insert characters
478. Select the type(s) of OS. Single user, Multi-tasking; Single user, Single Task; Real time operating systems; Multi user, Multi-tasking
479. SELinux can be used to apply least privilege to linux users. True
480. SELinux has poor logging capabilities. False
481. SELinux is Linux implementation of. MAC
482. SeLinux is set to \_\_\_\_ by default on newer versions of Red Hat type operating systems. Enforcing
483. SELinux is very easy to manage and troubleshooting is equally easy. False
484. Semaphore is a/an \_\_\_\_\_ to solve the critical section problem? integer variable
485. Semaphores: synchronize critical resources to prevent contention
486. Serial processing was used From late 1940s to the mid-1950s
487. Setting which of the following environment variables will change the language and encoding for the current login session to French? LANG=fr\_FR.iso-8859-15
488. Shell command man pages are typically located in section \_\_\_\_\_. 1
489. Shell variables are case insensitive. True or False? False
490. Shell variables are used to: Hold critical system information
491. Short-term scheduler, or dispatcher, picks a process. Each process in the queue is given some time in turn. This strategy is called: Round-robin technique
492. Should xwindows be used самый длинный ответ Depends ...
493. SMTP is the standard protocol for communication between email server and mail client. True or False? False
494. Some distributions allow software to be installed at main operating system installation time. True
495. Sourcing is an effective way to test initialization file changes. Which of the following is used to source a file? Either . character or the source command
496. Special file man pages are typically located in section \_\_\_\_\_. 4
497. Spool Simultaneous Peripheral Operations On-Line
498. SQL statements must be capitalized for error-free execution.True or False? False
499. SQL statements must be terminated with a: Semicolon ;
500. SSH is an insecure way of accessing other system: False
501. SSH Tunneling is the same as \_\_\_\_\_. SSH Port Forwarding
502. sudo iptables -A INPUT -p tcp --dport ssh -j ACCEPT. What these commands do? To allow incoming traffic on the default SSH port (22), you could tell iptables to allow all TCP traffic on that port to come in
503. sudo sh -c "iptables-save > /etc/iptables.rules" . What these commands do? To save your firewall rules to a file
504. Suppose that a process is in “Blocked” state waiting for some I/O service. When the service is completed, it goes to the: Ready state
505. System Administration man pages are typically located in section \_\_\_. 8
506. System administrators can use logs for all of the following, except: Installing new packages
507. System administrators can use logs for: Tuning the system for efficiency or security
508. System crontabs are generally found in which of the following directories? /var/spool/cron; /etc/cron.d
509. Systemd uses: Targets
510. TCP is higher layer. True
511. TCP/IP stands for: TCP/IP (Transmission Control Protocol/Internet Protocol)
512. The /bin directory contains: The most fundamental commands that are essential for the operating system to function
513. The /etc/cups/classes.conf file is used by the cupsd daemon for: Storing the list of available local printer classes
514. The /etc/cups/printers.conf file contains three printer entries. What should Joe do so that everyone uses the HP1600 printer by default? Specify the DefaultPrinter directive for the HP1600 printer
515. The /etc/localtime file is a flat file containing plain text that is used to configure the system wide time zone.True or False? False
516. The /etc/nologin file is used to prevent all users from logging on to the system. True or False? False
517. The /etc/nsswitch.conf file defines the order in which DNS and the /etc/hosts file are queried for host name information. True or False? True
518. The /etc/ntp.conf file lists three servers for querying. Two of them return the time 10:54:23 while the third one shows a different time (i.e. 10:50:37). The system will use which of the return values? It will use 10:54:23 since this is what the majority of servers indicate
519. The /etc/ntp.conf file shows that NTP servers are being queried using iburst mode. This enables: Speeding up of initial synchronization
520. The /etc/passwd file can be modified by which of the following? Root user
521. The /etc/sudoers file should be edited using the \_\_ editor only. visudo
522. The /sbin directory contains: Essential administrative commands
523. The /usr/local/bin directory contains: Commands that have been compiled from local sources
524. The [ ] characters around day in the example cal [-smjy13] [[[day] month] year] means that day is: Optional
525. The \_\_\_\_\_ command can be used to check if the command already exists. Type
526. The \_\_\_\_\_ command displays information about the Linux kernel: uname
527. The \_\_\_\_\_ command is used for troubleshooting the configuration of DNS servers. dig
528. The \_\_\_\_\_ command is used to display the value of a specific variable. Echo
529. The \_\_\_\_\_ command is used to do reverse IP address lookups. host
530. The \_\_\_\_\_ command is used to generate SSH keys. ssh-keygen
531. The \_\_\_\_\_ command is used to load a module along with its dependencies. modprobe
532. The \_\_\_\_\_ command is used to print a sequence of numbers. seq
533. The \_\_\_\_\_ command is used to view the fully qualified domain name of the host. hostname –f
534. The \_\_\_\_\_ command provides many options for formatting a file for printing. pr
535. The \_\_\_\_\_ command used to disable a network interface is identical to \_\_\_\_\_. ifdown eth0 , ifconfig eth0 down
536. The \_\_\_\_\_ command will allow you to see commands that you have previously executed. history
537. The \_\_\_\_\_ command will display how much space a directory is using. du
538. The \_\_\_\_\_ command will display how much space a filesystem has free? df
539. The \_\_\_\_\_ command will display your current working directory. pwd
540. The \_\_\_\_\_ command will list the commands that are running in your terminal. ps
541. The \_\_\_\_\_ command will search for files by searching the live filesystem. find
542. The \_\_\_\_\_ command will search for files using a database of all files, which is generated daily. locate
543. The \_\_\_\_\_ command will take another command for the argument to execute. exec
544. The \_\_\_\_\_ command will tell you if a command exists as a built-in command, function, alias or a command located within the PATH variable. Type
545. The \_\_\_\_\_ file is read at boot time on Red Hat based systems to set the host name. /etc/sysconfig/network
546. The \_\_\_\_\_ indicates the maximum number of IP routers that can route a packet. Time to Live
547. The \_\_\_\_\_ is a kernel module used by the kernel to manage hardware devices. Subsystem
548. The \_\_\_\_\_ is used as an index into the page table. page number
549. The \_\_\_\_\_ mapping method is supported by Unicode. Universal Character Set (UCS)
550. The \_\_\_\_\_ option can be used with the edquota command to copy the quota limits from one user account to another. -p
551. The \_\_\_\_\_ option to the uname command will display the kernel name. -s
552. The \_\_\_\_\_ order avoids GRUB from showing all but the default bootable title until the user presses a key. hiddenmenu
553. The \_\_\_\_\_ statement can be used to gather information from the user running the script. read
554. The \_\_\_\_\_ statement is most useful in performing an operation on multiple items. for
555. The \_\_\_\_\_ table contains the base address of each page in physical memory. Page
556. The \_\_\_\_\_ variable stores directories that the shell used to find executable files. PATH
557. The “.” in an ls listing represents: The current directory
558. The 12. The date command can show the time only in 0-23 hour format. command can show the time only in 0-23 hour format. True or False? False
559. The 2 types of boot protocols on startup for an interface are: DHCP/Static (либо DHCP/none)
560. The 3rd octet is used for creating subnets for Class C networks. True or false? False
561. The 4th octet is used for creating subnets for Class C networks. True or False? True
562. The acronym SQL stands for: Structured Query Language
563. The address of a page table in memory is pointed by: page table base register
564. The address of the next instruction to be executed by the current process is provided by the: program counter
565. The at.allow and at.deny files can be used to control access to: at and batch commands
566. The available vector defines total amount of each resource NOT allocated to any process
567. The banker's algorithm is referred to as resource allocation denial
568. The base register Contains the staring address of the region of memory occupied by the process
569. The basic form of a command line is: command [options…] [arguments…]
570. The battery-powered clock, which keeps time when the system is shut down, is known as the: Hardware clock
571. The behavior of the mailq command is identical to the sendmail –bp command for systems that are using sendmail. True or False? True
572. The behavior of the newaliases command is identical to the sendmail –bi command for systems that are using sendmail. True or False? True
573. The best way to group multiple commands and pass arguments is to: Use functions
574. The bootloader (GRUB/LILO) loads which of the following components into memory? (choose two) The ramdisk; The kernel
575. The central idea in this system was the use of a piece of software known as the monitor Simple batch system
576. The central themes of operating system design are all concerned with the management to processes and threads? Multiprogramming, multiprocessing, distributed processing
577. The chage command supports a \_\_\_\_\_ mode. interactive
578. The CLI is one of the ways of issuing commands to operating system. CLI stands for: Command Line Interface
579. The code that changes the value of the semaphore is: critical section code
580. The color depth for the display manager determines: Maximum number of colors that can be displayed on the screen
581. The command “su Alice”. Allows us to switch to the Alice user
582. The command bash script\_file can be used to directly execute a shell script. True or False? True
583. The command chage CANNOT be used to: Delete a user
584. The command echo a\* will display: All of the files in the current directory that begin with an “a” character.
585. The command man 5 passwd will: Display the man page of Section 5 for passwd.
586. The command manual ls will provide detailed information about how the ls command functions. True or False? False
587. The command passwd –S test\_user produces the following output: test\_user NP 03/28/2014 0 99999 7 -1 What information does this convey regarding the password status of the test\_user account? There is no password
588. The command PATH=$PATH:/home/John does the following: Appends the directory /home/John to the existing PATH variable
589. The command read –p will capture the current position of the mouse pointer. True or False? False
590. The command that is used to create an encrypted password that can be used with the pas …. grub-md5-crypt
591. The command to remove an existing alias from the current shell is: unalias
592. The command, chmod 0777 /data will: Remove all special permissions
593. The command, chmod 1777 /data will: Make the /data directory a sticky bit directory
594. The command, chmod 2777 /data will: Make the /data directory a setgid directory
595. The command, chmod a+x will: Add execute permission for all users
596. The command, chmod u=g will: Set the user owners permissions to match the group owners permission
597. The concept of a batch operating system was developed to Maximize processor utilization (To improve utilization)
598. The concept of modes of operation (user mode, system mode) was introduced with Simple batch system
599. The configuration files of inetd and xinetd are identical and can be used interchangeably. True or False? False
600. The context of a process in the PCB of a process DOESN’T contain: context switch time
601. The core software component that tells the hardware what actions to take is called the \_\_\_\_\_\_\_\_. kernel
602. The cpio command has four modes of operation. True or False? False
603. The cpio command will preserve metadata when copying files. True or False? True
604. The cron scheduler should be used if the jobs are to be run at a particular hour and minute. True or False? True
605. The crond daemon can be restarted using the command /etc/init.d/crond restart True
606. The crontab command can be used to: Create crontab files; Remove crontab files; List crontab files
607. The crontab keyword @reboot implies that the job runs: Once, at startup
608. The daemon associated with the cron utility is called the \_\_\_\_\_\_\_\_\_\_\_ daemon. crond
609. The daemon program that provides logging services for the Linux kernel is: klogd
610. The daemon that provides logging services for applications and programs is: syslogd
611. The database administrator decides to break one large employee table into two parts. The first table, employee\_master, contains selected key information that does not change over time. The second table, employee\_details, contains data that is considered optional. The relationship between employee\_master and employee\_details would most likely be a: One-to-one relationship
612. The date command is used for: Setting the system date and time; Assigning filenames with timestamps suffixed to them in scripts; Viewing current date and time
613. The dd command can be used to copy entire partitions. True or False? True
614. The dd command can be used to create iso files. True or False? True
615. The dd command can be used to create large files the can be used as swap files. True or False? True
616. The deamon that provides logging service for applications and programs is: Syslogd
617. The default route is the route that will be used when the router \_\_\_\_\_\_\_. Does not have a route for the packet’s destination in the routing table
618. The default value for load average for running the batch command can be changed using which of the following commands? atd –l
619. The degree of multi-programming is: the number of processes in memory
620. The display manager provided by the GNOME desktop environment is called gdm.True or False? True
621. The end user views a computer system in terms of a set of applications
622. The essential GRUB 2 setup is overwritten when the \_\_\_\_\_ command is executed on CentOS. update-grub
623. The eth0 NIC has been mapped to two IP addresses. This is known as: IP aliasing
624. The expand and unexpand commands change: (choose two) Spaces; Tabs
625. The expression a{5} will match \_\_\_\_\_\_\_\_\_\_\_\_\_ characters with the previous regular expression. exactly 5
626. The fetched instruction is loaded into the IR
627. The FHS sets which standard? Which directories should be used to hold specific files
628. The fifth field in the /etc/fstab file is used to specify: The dump level
629. The file /etc/mail/aliases.db is the binary format of the file /etc/mail/aliases. True or False? True
630. The file command uses \_\_\_\_\_ to determine file types. the “magic” file
631. The file which is the main for GRUB 2 in the CentOS system /boot/grub2/grub.cfg
632. The file which is the main for GRUB 2 in the Ubuntu system /boot/grub/grub.cfg
633. The file which used to verify the services indicated within the inetd configuration. /etc/services
634. The firmware bootloader for PowerPC systems is called \_\_\_\_\_. YABOOT
635. The firmware bootloader for Sparc systems is called \_\_\_\_\_. SILO
636. The first field in the /etc/fstab file is used to specify: The device to mount
637. The first fit, best fit and worst fit are strategies to select a \_\_\_\_\_\_. free hole from a set of available holes
638. The first line in a shell script reads:#!/bin/bashWhat does it signify? The executable (shell) to use to run the script
639. The first process that the kernel launches is called the \_\_\_\_\_ process. init
640. The first stage of the boot process is: The firmware (BIOS/UEFI) stage
641. The first step to creating a disk quota is: Edit the /etc/fstab file
642. The follow services should be turned off unless they are used except: init
643. The following can show commads of running processes, except: (ответ, кроме ps, top, pstree)
644. The following can show commands of ... ps
645. The following SQL command is run: UPDATE people SET LastName=”Albert”;What is the problem with this statement? Since there is no WHERE clause, it sets the last name of all the people in table
646. The fourth field in the /etc/fstab file is used to specify: The mount options
647. The fourth stage of the boot process is: The init phase
648. The fsck utility uses which file to determine a filesystem type? /etc/fstab
649. The glob pattern [!abc]\* All files that start with any character except “a”, “b” or “c”
650. The glob pattern [a-d] would match: A file name with a single character that is either a “a”, “b”, “c”, or “d”.
651. The gpg command operates in a \_\_\_\_ mode. interactive
652. The group ownership of a file may only be changed by: Both the root user and the owner of the file
653. The groups command displays your current primary group as the first group while the getent command will always display the default primary group. True or False? True
654. The GRUB2 setting that sets the default operating system to boot is called \_\_\_\_\_. GRUB\_DEFAULT
655. The hardware and software used in providing applications to a user can be viewed in a: layered fashion
656. The head -n -1 readme.txt command will: Display all but the last line of readme.txt
657. The I/O module performs the requested action and alerts the processor to request service when it is ready to exchange data with the processor. Interrupt-driven I/O
658. The I/O module performs the requested action and then sets the appropriate bits in the I/O status register but takes no further action to alert the processor. Programmed I/O
659. The ifdown command can be used to disable all configured network interfaces. True or False? True
660. The ifup command can read interface definitions from a file other than the default file. True or False? True
661. The inetd and xinetd daemons can run simultaneously on a system. True or False? False
662. The inetd daemon will automatically reload the configuration file if it is modified. True or False? False
663. The initial value of the semaphore that allows only one of the many processes to enter their critical sections, is? 1
664. The INSERT statement can add only one record at a time.True or False? False
665. The IP address of your host is 192.168.10.16. In order to connect to another host with the IP address of 192.86.74.16, your router will have to be connected to the subnets: 192.168.10.0 and 192.86.74.0
666. The kernel’s routing table can be viewed using the commands \_\_\_\_\_\_. netstat and route
667. The kernel’s routing table contains static and dynamic routes. True or False? False
668. The kernel’s routing table is maintained by the IP protocol. False
669. The key press combination that will request a process to stop is: CTRL+z
670. The key press combination that will request a running process terminate: CTRL+c
671. The klogd facility gets the messages from syslod and decides the action based on configuration settings. True or False? False
672. The limit register Defines the size of the region of (in bytes or words)
673. The line root ALL=(ALL)ALL indicates that the root user has permissios to run all commands on all systems without a password. False
674. The link between two processes P and Q to send and receive messages is called: communication link
675. The Linux system assigns a default IP address to a newly installed NIC. True or False? False
676. The listing of a directory shows certain files with permissions set to rwsr-xr-x. What does this indicate? SUID bit is set for the file
677. The location of users’ default shells is stored in the \_\_\_\_\_\_ file. /etc/passwd
678. The ls command can list the contents of only one directory at a time. True or False? False
679. The ls command will list which of the following by default? The current directory
680. The ls-l command output will not include: File contents
681. The mail alias file contains the following alias: movie\_buffs. Five users are associated with this alias. If a message is sent to movie\_buffs, who will receive the message? All five members
682. The main advantage of running a process in the background is: You can continue to use the shell that started the process
683. The main disadvantage of this technique: consumes a lot of processor time, because every word of data that goes from memory to I/O module or from I/O module to memory must pass through the processor. Interrupt-driven I/O
684. The main disadvantage of this technique: it is a time-consuming process that keeps the processor busy needlessly. Programmed I/O
685. The main disadvantage of this technique: there is a competition for bus usage. Direct memory access (DMA)
686. The maximum value of the field in the /etc/shadow file which is responsible for the password expiry period. 99999
687. The memory allocation scheme subject to "external" fragmentation is? Segmentation
688. The memory allocation scheme subject to "internal" fragmentation is? multiple contiguous fixed partitioning
689. The memory blocks are mapped on to the cache with the help of \_\_\_\_\_\_\_\_\_ Mapping functions
690. The mkdir command cannot be used to: Delete a directory
691. The module transfers the entire block of data to/from memory without going through the processor. Direct memory access (DMA)
692. The mv command can be used to move more than one file at a time. True or False? True
693. The mv command will rename a file when a new directory is not specified. True or False? True
694. The name of file that contains user account information for your system? /etc/passwd
695. The names of hidden files begin with the \_\_\_ character. .
696. The netstat command can be run continuously in batch mode. True or False? True
697. The netstat command is used to add a route to the kernel’s routing table. True or False? False
698. The network interface disabled using the ifdown command will remain disabled after the system restarts. True or False? False
699. The number of inodes in a filesystem is: Determined when the filesystem is created
700. The number of mail messages in the queue is increasing. Which of the following could cause this? Target mail server is down; Configuration issue with local mail server; Problem with mail delivery
701. The number of resources requested by a process: must not exceed the total number of resources available in the system
702. The objective of multi-programming is to: to maximize CPU utilization
703. The only person who can change the user ownership of a file is: The root user
704. The only user with the capability to change the owner of a file is root. True or False? True
705. The operating system maintains a \_\_\_\_\_\_ table that keeps track of how many frames have been allocated, how many are there, and how many are available. Frame
706. 'The OS as a resource manager' corresponds to the following objective: Efficiency
707. 'The OS as a User/Computer interface' corresponds to the following objective: Convenience
708. The output of the command seq 10 10 30 will be: 10 20 30
709. The output of the ls -l command includes “/etc/grub.conf -> ../boot/grub/grub.conf”. Based on this information, which is the soft link file? /etc/grub.conf
710. The parent process of all process in Linux called root. False
711. The parent process of all processed called root? False, it’s called init
712. The path /data/file.txt is: An absolute path
713. The PATH environment variable is used for: Specifying directories to search for executable files
714. The path testdir/file.txt is: A relative path
715. The PATH variable will be used under which situation? The command is not found.
716. The precision provided by NTP is on the order of: Tens of million seconds
717. The primary configuration file for GRUB 2 on an Ubuntu system is \_\_\_\_\_. /boot/grub/grub.cfg
718. The primary configuration file for the GRUB 2 on a Fedora system is \_\_\_\_\_. /boot/grub2/grub.cfg
719. The primary distinction between the short-term scheduler and the long-term scheduler is: the frequency of their execution
720. The primary GRUB 2 configuration is overwritten when the \_\_\_\_\_ command is executed on Fedora systems. grub2-mkconfig
721. The primary GRUB 2 configuration is overwritten when the \_\_\_\_\_ command is executed on Ubuntu systems. update-grub
722. The principal objective of the time-sharing system is to Minimize response time
723. The principal tool available to system programmers in developing the early multiprogramming and multiuser interactive systems Interrupt
724. The Process Control Block is: data structure
725. The process index register Contains the index into a process list of the process currently controlling the processor
726. The processor contains a single data register, called AC
727. The processor issues an I/O command to a module and then go on to some other useful work. Interrupt-driven I/O
728. The processor issues an I/O command to a module and waits, periodically checking the status of the I/O module until it finds that the operation is complete. Programmed I/O
729. The processor issues an I/O command to a separate module, by sending the type of operation (read/write), the address of the I/O device, the starting location in memory for data, number of words. Then the processor continues with other work. Direct memory access (DMA)
730. The processor tests for a pending interrupt request, determines that there is one, and sends an acknowledgment signal to the device that issued the interrupt.The acknowledgment allows the device to remove its interrupt signal.
731. The processor was often idle waiting for the I/O instruction to conclude. To overcome the problem the following approach was introduced: when one job needs to wait for I/O, the processor can switch to the other job. This was a Multiprogramming or multitasking batch system
732. The program that first starts the boot process is called the \_\_\_\_\_. bootloader
733. The programmer interacted directly with the computer hardware with Serial processing
734. The quotacheck command creates databases with which names? (choose two) aquota.group; aquota.user
735. The range defined inside of square brackets is based on the: ASCII text table
736. The reference time that the system time is calculated from is known as: Epoch time
737. The reference time used by NTP is: UTC
738. The regular expression a\* is equivalent to: a{0,}
739. The regular expression a? is equivalent to: a{0,1}
740. The regular expression a+ is equivalent to: a{1,}
741. The research team for ABC Corp is being increased from one to five members. What is the best way to add new team members to the server? Create a group named research , with each member given an account belonging to the group.
742. The resource vector define total amount of each resource in the system
743. The return status from a command is 1. What does this indicate? Command did not execute successfully
744. The rm command can be used with glob characters to delete multiple files. True or False? True
745. The rmdir command can be used to delete directories and their contents. True or False? False
746. The root user can convert the password of any user into readable text form.True or False? False
747. The routing table shows an entry with genmask 0.0.0.0, this indicates the \_\_\_\_\_. Default Route
748. The rpm2cpio command can be used to: (choose two) List the content of a “.rpm” file; Extract files from a “.rpm” file
749. The same set of services are started or stopped at different runlevels. True or False? False
750. The second field in the /etc/fstab file is used to specify: The mount point
751. The second stage of the boot process is: The Bootloader (LILO/GRUB) stage
752. The segment of code in which the process may change common variables, update tables, write into files is known as? critical section
753. The serial processing presented two main problems: setup time; scheduling
754. The set-associative map technique is a combination of the direct and associative technique True
755. The setuid permission on a file: Causes the file to run under the owner’s identity
756. The simplest way to deny someone access to their account is changing their shell to /sbin/nologin
757. The sixth field in the /etc/fstab file is used to specify: The fsck order
758. The size of a DSA key is: Exactly 1024 bits
759. The smaller, more expensive, faster memory is: Cache
760. The spatial aspect of the locally of reference means \_\_\_\_\_\_\_\_ That the instruction in close proximity of the instruction executed will be executed in future
761. The SSH utility is provided by the OpenSSH package. True or False? True
762. The ssh-add program ran for user will, but his RSA identity files were not added, what could be the reason for this? The file /home/will/.ssh/id\_rsa has read permissions for users other than Will
763. The ssh-add utility can be used to add only RSA keys. True or False? False
764. The state of a process is defined by: the current activity of the process
765. The statement if [ -d file ] will be true, if the file: Is a directory
766. The sudo command can cache user’s credentials. True or False? True
767. The SUID process forks a new process that does not have SUID access. True or False? False
768. The syntax [-u|–utc|–universal] means: These three options mean the same thing
769. The syslog.conf is currently set to \*.info. Which of the following will result in more verbose logging messages? \*.debug
770. The syslogd facility gets the messages from klogd and decides the action based on configuration settings. True or False? True
771. The system administrator can enforce limits on the size of files created by users (in terms of number of blocks) using the ulimit command. True or False? True
772. The system administrator is seeing a surge in the number of logged messages. She checked the process accounting setting and it is not turned on. What else could be the reason for the sudden increase? Due to configuration errors or hardware errors
773. The system administrator is seeing a surge within the number of logged messages…: Due to configuration errors or hadware errors
774. The system administrator is setting up the audio feedback mechanism when keyboard modifier keys are pressed. This is an example of: Toggle keys
775. The system administrator needs to create a transitory client account to be utilized for as it were six days. Promptly after six days, the access following values should be set for the transitory client within the shadow file: Expire date = today + 6
776. The system administrator notices that a file shows a numeric group id 1508. What does this signify? Group name corresponding to GID 1508 is deleted
777. The system administrator wants to allow certain users to access the crontab command but not others. This can be done by: Managing entries in cron.allow and cron.deny files
778. The system administrator wants to check the status of a database every hour. Which of the following crontab entries will ensure that the script runs every hour (on the hour) from 8AM to 5PM, Monday through Friday? 00 08-17 \* \* 1-5 /home/appuser/bin/check-db-status
779. The system administrator wants to create a crontab entry to perform daily backups. Which of the following keywords should be used? @daily
780. The system administrator wants to create a temporary user account to be used for only five days. Immediately after five days, the account should become unavailable for login. The following values should be set for the temporary user in the shadow file: Exdate=today+5
781. The system administrator wants to delete the user account joe. However, joe is already logged in to the system. Which of the following commands will allow the administrator to delete joe? userdel –f joe\_user
782. The system administrator wants to implement centralized logging for the network. Hosts on the network must be configured for: Remote logging using syslog
783. The system administrator wants to make the password empty for user Don. He should execute the passwd command with which of the following options? –d Don
784. The system administrator wants to use the keyboard for moving the mouse pointer around the screen. This is done by implementing: Mouse keys
785. The system clock calculates time as number of seconds elapsed since: 01-Jan-1970 00:00:00
786. The system clock contains both time and time zone information. True or False? True
787. The system comparable of runlevels are called? targets
788. The system has a /etc/ssh/ssh\_config file and the user Mike also has a ~/.ssh/config in his home directory. Which file will be used when Mike connects to a server via SSH? ~/.ssh/config
789. The systems which allows only one process execution at a time, are called uniprogramming systems
790. The tar command supports which of the following styles of option(s)? (choose three) GNU; BSD; Unix
791. The tar command supports: Both gzip and bzip2 compression
792. The technique of searching for a block by going through all the tags is \_\_\_\_\_\_ Associative search
793. The third field in the /etc/fstab file is used to specify: The filesystem type
794. The third stage of the boot process is: The kernel phase
795. The time before booting the default image is set by GRUB\_TIMEOUT. True
796. The Time to Live indicates the maximum number of IP routers that can route a packet. True
797. The Time to Reach indicates the maximum number of IP routers that can route a packet. False
798. The touch command can be used to change a file’s time-stamp to something other than the current system time. True or False? True
799. The traceroute command can be used by regular and root users. True or False? False
800. The transfer of messages between machines and routing them to the correct destination is done by the Mail Transfer Agents (MTAs). True or False? True
801. The two atomic operations permissible on semaphores are: wait; signal
802. The two files used by TCP Wrappers to control access are \_\_\_\_\_: /etc/hosts.allow and /etc/hosts.deny
803. The two kinds of semaphores are: counting; binary
804. The two login types are: CLI and GUI
805. The unzip command can be used without options to extract files from a zip archive. True or False? True
806. The uptime command prints a statistic representing the system load over what three time spans? (choose three) Last minute; Last five minutes; Last fifteen minutes
807. The user and group number of root 0 True
808. The username of the user running the script. $USER
809. The view only options of the ifconfig command need root privileges. True or False? False
810. The Windows Cluster Server design makes use of the following concepts: Super computer, Server, Workstation, Clients
811. There were no OS with Serial processing
812. This body is responsible for assigning public IP addresses: InterNIC
813. This chooses which block to replace when a new block is to be loaded into the cache and the cache already had all slots filled with other blocks: replacement algorithm
814. This command displays binary files in a variety of representations: od
815. This contains the most frequently used functions in the OS: Kernel (или nucleus)
816. This determines which cache location the block will occupy: Mapping function
817. This ﬁle contains passwords for your user accounts. /etc/shadow
818. This ﬁle contains your system’s groups /etc/groups
819. This illustrates the progress of two processes competing for two resources joint progress diagram
820. This matrix defines requirements of processes i for the resources j Claim matrix
821. This matrix defines the amount of resources of type j requested by process I Request matrix
822. This matrix defines the current allocation to process i of the resource j Allocation matrix
823. This register contains the data to be written into memory or which receives the data read from memory memory buffer register
824. This register is used for the exchange of data between an I/O module and the processor I/OBR
825. This register specifies a particular input/output device I/OAR
826. This register specifies the location in memory for the next read or write Memory address register
827. This resource can be created and destroyed consumable resource
828. This resource can be safely used by only one process at a time and is not depleted by that use reusable resource
829. This stream is the output of a command operating normally: stdout
830. This system handles multiple interactive jobs Time-sharing-system
831. This system was developed by General Motors for the use on an IBM 701 Simple Batch Systems or GM-NAA I/O
832. This term was first used by the designers of Multics in the 1960s Process
833. This type of memory is nonvolatile: Secondary memory
834. This type of system was developed at MIT by a group known as Project MAC for the IBM 709 in 1961 Time-sharing-system
835. Three techniques are possible for I/O operations: Programming I/O, Interrupt-driven I/O, Direct memory access(DMA)
836. To access a directory with the cd command, you must also be able to access all the parent directories of the directory with the cd command. True or False? True
837. To activate a swap space that has been initialized, you can execute: swapon
838. To avoid the race condition, the number of processes that may be simultaneously inside their critical section is: 1
839. To be able to modify a user’s quotas with a non-interactive command, you can use: setquota
840. To change the niceness value of an existing process, you can use the \_\_\_\_\_ command. renice
841. To copy the contents of a directory, use the following option(s) for the cp command: (choose two) –r; -R
842. To create both user and group quota databases with the quotacheck command, use the \_\_\_ and \_\_\_ options. (choose two) -g; –u
843. To decompress the archive example.gz, use the following command: gunzip example.gz
844. To display your current location within the filesystem, you can type: pwd
845. To execute a command called “simple” as a foreground process, you would type: Simple
846. To execute a command with the default priority, which value do you pass to the nice command? 0
847. To execute a command with the highest possible priority, which value do you pass to the nice command? -20
848. To execute a command with the lowest possible priority, which value do you pass to the nice command? 19
849. To force a job to be run irrespective of its timestamp, the anacron command can be used with which of the following options? –f
850. To get the grep command to show the names of files that matched instead of the content that matched, you can use the option: -l
851. To go to the beginning of a line in the vi command mode, you press: ^
852. To go to the first line of a vi document in command mode, you can type: (choose two) 1G; gg
853. To have permissions set to rwxr-x–x, you can use the following command: chmod 751
854. To have the quotacheck create or update all quota databases, use the \_\_\_ option. -a
855. To maintain timestamps when using the cp command, use: -a
856. To move backward through a vi document, word by word, you press: b
857. To move forward one word at a time in the vi command mode, you press: w
858. To navigate to the end of the line in vi command mode, you can press: $
859. To perform a “long listing” to show file details, use which of the following commands: ls -l
860. To perform cut and paste in a vi document, you actually do: delete and put
861. To process a script file in the current context, you execute: (choose two) . source
862. To put the lines of a file in alphabetical order, you can run: sort
863. To redirect the errors that are output by a command, you can use: 2>
864. To replace the currently running shell, you can use: exec
865. To run a script file, you need both read and execute permission. True or False? True
866. To run binary executables, you need both read and execute permission. True or False? False
867. To save and then quit, you can type in command mode: :wq
868. To search backward from your cursor in your vi document in command mode, you can type \_\_ followed by the pattern to search for. ?|
869. To search for something while viewing a man page, you first type a \_\_ character. /
870. To search forward from your cursor in your vi document in command mode, you can type \_\_ followed by the pattern to search for. /
871. To see a list of commands that are available while viewing a man page, you can type the \_\_ character. h
872. To see how long the system has been running, you can use the \_\_\_\_\_ command. uptime
873. To see the list of background processes that you have started in your shell, you can run: jobs
874. To send a paused process to the background, use the \_\_\_\_\_ command. bg
875. To send a signal to a set of processes with the same name, you can run: killall
876. To send the normal and error output of a command to a single file, you can use: &>
877. To set a priority value lower than 0, you must log in as which user? The root use
878. To specify a runlevel to boot at, add the run level to the end of the \_\_\_\_\_ directive line. kernel
879. To switch to another group, you must: Be a member of the group that you are switching to
880. To use “plug and play”, which components must support hotplugging that device? Device Driver, Interface, Operating System
881. To use an encrypted password in the GRUB Legacy configuration file, use the \_\_\_\_\_ option to the password directive. –md5
882. To use extended regular expressions, you can use: (choose two) egrep; grep -E
883. To use regular expression characters to match themselves, you cannot: Use the slash in front of the character
884. To verify if a NTP server is available, which of the following commands should be executed? ntpdate –q
885. To view all current variables, you can use: set
886. To view all processes on the system, you can execute: ps -e
887. To view an individual’s quota usage, an administrator can use: quota
888. To view statistics on memory availability, you can use: free
889. To view system memory usage, you can use the \_\_\_\_\_ command. free
890. To view the ASCII text table in Linux, you can use the following command: man ASCII
891. Two NTP servers are used by ntpd; one runs Stratum-2 clock while the other uses Stratum-4. Which one is considered to be more accurate? Stratum-2
892. Two or more commands combined with the “|” between them form a: pipeline
893. 'Two or more programs hung up waiting for each other'. This is Deadlocks
894. Two tables have columns with the same field names. What is required in order to join the two tables? Field names must be prefixed by the table name and a period
895. Types of Ip addresses used on the Internet? Public and Private
896. Typical BASH exit scripts are found in ~/.bash\_logout and \_\_\_\_\_\_\_\_\_\_ files. /etc/bash\_logout
897. Typing which of the following from vi command mode will attempt to save your file? :w
898. Ubuntu is derived from which Linux distribution? Debian
899. UFW and firewalld are generally easier to configure than iptables True
900. UFW is enabled via what command? ufw enable
901. UFW is way that we can use iptables within Ubuntu systems. True
902. Use of SETUID permission on scripts is the best way to specify permissions.True or False? False
903. Use of which of the following options for the lpadmin command will enable the printer and make it ready to accept jobs? –E
904. Use the \_\_\_ option to display hidden files with the ls command. -a
905. User home directories often contain hidden files. True or False? True
906. User lori reported that her account is locked. Which of the following commands will unlock her account? usermod –U lori
907. Using double quotes to show a string of characters won’t allow any variables in the quotes to be resolved whereas using single quotes to show a string of characters will allow variable resolution. True
908. Using SElinux can be better at protecting the system because ACL’s cannot protect you against everything. True
909. Using SUDO allows a user to elevate privileges. True
910. Using the command passwd –e test\_user , the root user can force a password change in the next login attempt.True or False? True
911. Using the kill command always terminates processes. True or False? False
912. Using the setgid permission on a directory: Causes new files created in the directory to be owned by the group that owns the directory
913. Using the touch command and specifying a nonexistent file… creates a blank file with that name.
914. Using US True
915. Using which expression(s) we can write the result of and expression to variable? expr with command substitution, let, double parentheses
916. Using which expression(s) we can write the result of and expression to variable? Let; expr with command substitution; double parentheses
917. UTC is not subjected to daylight saving time. True or False? True
918. UTF-8 is a fixed-width encoding scheme that can represent every character in the Unicode character set. True or False? False
919. Utilities are Application program
920. Variable-length block of data that resides in secondary memory is called \_\_\_\_\_\_\_\_. Segments
921. Virtual address is a Virtual address is a page number and an offset within the page
922. Virtual memory is also referred to as: Swap memory
923. Wapping: allows each program in turn to use the memory
924. We can group a sequence of character using open and close brackets. True
925. We can use both chown and chgrp to change the group ownership. True
926. We can use both gzip -d and gunzip to decompress file. True
927. We should use **chmod** to set permission for newly created files. False
928. We use OR operation if we want to perform the action if one of several condition is met. True
929. What are the correct options for the rpm command to display a list of all installed packages? -qa
930. What are the levels of access control on UNIX systems? User; Root
931. What are the numeric equivalents of the alphabetic permisson bits? r = 4, w = 2, x = 1
932. What are the permission types a UNIX file can be assigned? Read; Execute; Write
933. What are the processes that are initialized and controlled through a terminal session? Foreground; interactive
934. What are the two types of limits that can be set with the ulimit command? hard and soft
935. What attack does Modevasive protect against? Brute-force
936. What can you do with Bash Scripts? All of the above
937. What can you do with Bash Scripts? Making your own particular force tools/utilities; Customizing administrative tasks; Creating simple applications
938. What character do you place between commands to execute multiple commands on a single command line? ;
939. What command can be used as a prefix to another command to run it at an altered priority? nice
940. What command can be used to alter the priority of a running process? renice
941. What command is used to change the permissions of a file or directory? Chmod
942. What command is used to modify a file's owner? Chown
943. What command is used to remove files? Rm
944. What command makes the input silent? –s
945. What command perform a set of commands for each item in a list? for do done
946. What command perform a set of commands while a condition is true? while do done
947. What command will update a single Debian package named figlet? apt-get install figlet
948. What commands can display a list of mounted file systems? (choose two) mount; df
949. What determines how many files can be stored in a filesystem? The number of inodes
950. What directory is used as a temporary mount point? /mnt
951. What does !! signify in the /etc/shadow file? The account is locked
952. What does “|” do in a regular expression? Separates alternative patterns that can be matches
953. What does a distribution provide to add and remove software from the system? Package manager
954. What does GNU stands for? Gnu’s not Unix
955. What does mkdir command do? Creates directory
956. What does pkill do? Choose the best answer? Kills a process
957. What does the /etc/init.d directory contain? Scripts for the different run levels
958. What does the ~/.ssh/id\_rsa file contain? RSA private key of the user
959. What does the command chmod do? Changes (file)group permissions
960. What does the command, init 6 , do? Restart the system
961. What does the delay field in an anacrontab entry signify? The command should wait for a specified number of minutes after the machine starts
962. What does the entry AllowGroups dba netusers in the /etc/ssh/sshd\_config indicate? Users who are part of the dba and netusers groups will be allowed access
963. What does the following snippet in the xinetd configuration file indicate? service telnet { disable = yes …. The telnet service is disabled
964. What does the following SQL command output? SELECT \* FROM Projects WHERE ProjectID LIKE “P\*”; This displays all projects where ProjectID starts with P
965. What does the mount option ro dev mean if placed in the fourth field /etc/fstab file? Nothing, the option is invalid because a space is not permitted between options
966. What does UTF-8 mean? UCS Transformation Format
967. What does vipw do?
968. What does, sshd: ALL, specified in the hosts.deny file indicate? Prevent SSH connection from all hosts
969. What extension should have bash script? script.sh
970. What happens if the user sysadmin invokes the mail command interface and there are no unread mail messages? The message No mail for sysadmin is displayed
971. What happens to the service request received by TCP Wrappers if the hosts.allow and hosts.deny files do not permit connection? Drop the packet and log a message
972. What happens when you login to a host using telnet? The inetd server receives the request on port 23 and starts telnetd to service this connection
973. What information is not stored in the /etc/shadow file? Encrypted password
974. What is a Firewall? A set of related programs that protects the resources of a private network from users from other networks.
975. What is a link layer? Includes device driver and network interface card
976. What is a long-term scheduler? it selects which process has to be brought into the ready queue
977. What is a medium-term scheduler? it selects which process has to remove from memory by swapping
978. What is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks? Paging
979. What is a route? a route is applied to an interface to tell traffic where to go
980. What is a Server? Is a computer program running to serve the requests of other programs, the ‘clients’
981. What is a short-term scheduler? it selects which process has to be executed next and allocates CPU
982. What is a trap/exception? software generated interrupt caused by an error
983. What is an operating system? A collection of software that manages computer hardware resources and provides common services for computer programs; The OS is a vital component of the system software in a computer system; It acts as an intermediary between a user and the computer system.
984. What is an Operating System? It acts as an intermediary between a user and the computer system; A collection of software that manages computer hardware resources and provides common services for computer programs
985. What is BASH? Bourne-Again Shell
986. What is caching? Copy information from slower to faster storage temporarily
987. What is compaction? a technique for overcoming external fragmentation
988. What is DNS? Domain Name Service
989. What is DOS? Disc Operating System
990. What is ENIAC? Electronic Numerical Integrator and Computer
991. What is equivalent of -wxr-x-wx permission? 353
992. What is interprocess communication? communication between two process
993. What is not a main structural element of a computer system? Operating system
994. What is NOT a purpose of using parentheses around parts of a regular expression? They can be used to change the order that the pattern is evaluating
995. What is not a type of Operating System? Terminal
996. What is NOT an example of consumable resource? Main memory
997. What is NOT an example of reusable resource? Interrupt
998. What is PID of **init**process? 1
999. What is SCP? Copies files from one system to onother over SSH
1000. What is the alternative of 165 permission? --xrw-r-x
1001. What is the alternative of 361 permission? -wxrw---x
1002. What is the alternative of 421 permission? r---w---x
1003. What is the alternative of 512 permission? r-x-x-w—
1004. What is the alternative of 543 permission? r-xr---wx
1005. What is the behavior of setting C locale? Strings are displayed as written in the initial code
1006. What is the command to search for files with no user? find / -nouser
1007. What is the command to search for files with no user? find / -nouser
1008. What is the command to view interface within Linux? ifconfig
1009. What is the default value of the PASS\_MAX\_DAYS variable, which defines the maximum number of days before the user must change his password? 99999
1010. What is the egrep? search a given set of data and print every line
1011. What is the end statement of case? Esac
1012. What is the end statement of do? Done
1013. What is the end statement of if? Fi
1014. What is the first program that is executed after system boot up? Init
1015. What is the format used for naming a locale definition file? language[\_territory][.codeset][@modifiers]
1016. What is the full path to the LILO configuration file? /etc/lilo.conf
1017. What is the function of a subnet mask? To determine whether an IP address exists on the local network or whether it must be routed outside the local network
1018. What is the function of the ssh-agent? Cache the decrypted private key and provide it to client programs
1019. What is the grep? search the input files for lines containing a match
1020. What is the limitation of telnet from the security perspective? Sends all data including usernames and passwords in clear text
1021. What is the main advantage in using yum over rpm? It can automatically resolve dependency issues between packages
1022. What is the main feature of a super server? Run as a master process and listen for incoming TCP connections and then start the required process
1023. What is the maximum memory that a 64 bit processor can theoretically use? 16 EiB
1024. What is the notification mechanism used to inform programs about a change in state of hardware devices? HALD uses dbus to send notifications
1025. What is the number equivalent of r--rwxrw- permission? 476
1026. What is the number equivalent of r-x--x—x? 511
1027. What is the outcome of running the command lpadmin –d lpicprinter? Printer lpicprinter becomes the default printer
1028. What is the PID of init process? 1
1029. What is the primary configuration file for yum? /etc/yum.conf
1030. What is the purpose of the lsof command? Listing of all files opened by active processes
1031. What is the ready state of a process? when process is scheduled to run after some execution
1032. What is the real location of the GRUB Legacy configuration file? /boot/grub/grub.conf
1033. What is the reason you would use the grep command with a quiet -q option? You want to use the logical outcome of the command
1034. What is the reusable resource: that can be used by one process at a time and is not depleted by that use
1035. What is the size of UDP headers? 8 bytes
1036. What is time sharing? Multiple user share computer simultaneously through terminals
1037. What is used to partition a network into different logical networks? Subnetting
1038. What loadable kernel module is the basis for the beginning firewalls? iptables
1039. What mean this regular expression ( $  )? matches the end of the line
1040. What mean this regular expression ( ^ )? matches the beginning of the line.
1041. What means this pipe symbol ( | ) in regular expression? the logical OR operation.
1042. What means this pipe symbol ( | ) in regular expression? the logical OR operation.
1043. What mechanism allows you to create a simple menu system? Select
1044. What method is used to apply TCP Wrappers to a network service? Compile using the /usr/lib/libwrap.a library
1045. What of the following is not true about the tracepath command? Can be used only by root user
1046. What option to the fdisk command is used for MS-DOS compatibility mode? -c
1047. What option to the fdisk command is used to display current partitions? -l
1048. What option to the fdisk command is used to utilize sector unit sizes? -u
1049. What option to the find command allows you to search for files by inode numbers? -inum
1050. What option to the kill command will list the signals for the system? -l
1051. What option to the mkfs command allows you to specify the type of filesystem to create? -t
1052. What option to the who command will display the current runlevel? -r
1053. What permissions are set for Read, Write and Execute for Owner and read for group and world? 744
1054. What permissions are typically placed on soft link files? rwrwxrwxrwx
1055. What port does SSH typically run on? 22
1056. What run level should be added to the end of the directive line to indicate the run level to load? kernel
1057. What statement tells Bash to leave the loop? Break
1058. What statement tells Bash to stop running through this iteration of the loop and begin the next iteration? Continue
1059. What tool allows you to take control of a remote computer using your computer? Using Remote Desktop
1060. What two differences are there between querying an installed RPM and an RPM package file with the rpm command? (choose two) You must use the full filename when querying the package; To query the package file, you have to add the -p option.
1061. What type of information is stored in the /etc/passwd file? User Account information
1062. What type of interface is a network interface card? Hardware interface
1063. What umask value would you use in order for new directories to have the permissions of rwxr-x–x? 026
1064. What version of GRUB is the most modern version? GRUB 2
1065. What we need to do if we want the variable to be available to the other scripts? need to export
1066. What will the following statement do?for name in `cat /root/users` Assign to the name variable each value in the specified file
1067. What will you write in order to check whether the directory with name "quizzes" exist or not? -d quizzes
1068. What will you write in order to check whether the variable “name” empty or not? Format: option variable name -z $name
1069. What would typing “4dh” do in vi command mode? Delete the previous four characters
1070. What you should write in order to edit the list of cronjobs? sudo crontab -e, crontab –e
1071. What you should write in order to get silent promt from user? Format: [command] [option(s)] input –s
1072. When a processor attempts to read a byte or word of memory, it firstly checks the: Cache
1073. When added to the /etc/fstab file, the userquota option will: Result in an error message, since userquota is an invalid option
1074. When an I/O device completes an I/O operation, the device issues an interrupt signal to the processor and then: The processor finishes execution of the current instruction before responding to the interrupt
1075. When copying entire devices using the dd command, you must specify: input file and output file only
1076. When did ENIAC build? in 1940s
1077. When each process in the set is blocked awaiting for resource siezed by another blocked process it is a deadlock
1078. When high priority task is indirectly preempted by medium priority task effectively inverting the relative priority of the two tasks, the scenario is called: priority inversion
1079. When memory is divided into several fixed sized partitions, each partition may contain \_\_\_\_\_\_\_\_. xactly one process
1080. When one process is inside a critical section of code, other processes mutual exclusion (mutex)
1081. When originally Linux Kernel was invented? 1991
1082. 'When programs share memory and their execution is interleaved by the processor, they may interfere with each other by overwriting common memory areas in unpredictable ways. The results of a particular program depend on the activities of other programs in a shared system'. This is Nondeterminate program operation
1083. When specifying a path, the \_\_ character symbolizes the current directory. .
1084. When the Linux computer was shut down, the system clock indicated 11:30:17. What will be the time of the hardware clock immediately after shutdown? 11:30:17
1085. When the memory allocated to a process is slightly larger than the process, then: internal fragmentation occurs
1086. When the system boots, the system clock is set using the value of the hardware clock. True or False? True
1087. When the time required for the I/O operation is less that the time to complete the execution of instructions between write operations in the user program, it is: Short I/O wait
1088. When the time required for the I/O operation will take much more time than executing a sequence of user instructions, it is: Slow I/O wait
1089. When typing a command, you can have the bash shell complete the command by pressing which key? The Tab key
1090. When using command line arguments, what does $# return? Number of passed parameters
1091. When using command line arguments, what does $$ return? Process ID of running script
1092. When using command line arguments, what does $\* return? Word containing all parameters
1093. When using command line arguments, what does $@ return? Array containing all parameters
1094. When using command line arguments, what does $0 return? Name of running script
1095. When viewing a file with the ls -l command, which character represents a file type of soft link? l
1096. When was TCP/IP developed? 1978
1097. When will the condition test –n STRING be true? If the length of STRING is nonzero
1098. When you create a hard link, it increases the hard link count by one. True or False? True
1099. When you create a soft link, it increases the hard link count by one. True or False? False
1100. Where are the scripts used to manage the init process located? /etc/rc.d/init.d
1101. Where is the users configuration file located? /etc/passwd
1102. Where located the existing mail aliases file? /etc/mail/aliases
1103. Which API is used for converting one character encoding to another? iconv
1104. Which API is used to query address information from the Name Service Switch (NSS) resolver? getaddrinfo()
1105. Which archiving method is compatible across Linux, Microsoft Windows and Mac operating systems? zip
1106. Which are the different types of IP addresses used on the Internet? Public and Private
1107. Which are the four types of aliases found in the /etc/sudoers file? User\_Alias, Host\_Alias, Runas\_Alias, and Cmnd\_Alias
1108. Which are valid link types in Linux? (choose two) Hard links; Soft links
1109. Which bootloader includes the Secure Boot feature? UEFI
1110. Which can be used for converting an older ASCII encoded file to UTF-8 encoding? iconv
1111. Which chain applies to locally-generated network packets? OUTPUT
1112. Which chain applies to network packets that are targeted for the host? INPUT
1113. Which character at the beginning of a long listing indicates a directory? d
1114. Which character at the beginning of a long listing indicates a regular file? -
1115. Which character at the beginning of a long listing indicates a symbolic link? l
1116. Which character(s) cannot be placed in variable names? Hyphen (“-“) character
1117. Which characters are not supported by ASCII? Mathematical symbols
1118. Which class’s IP addresses can be assigned to network interfaces? Class A, B and C
1119. Which command can an administrator run to rebuild the cache of shared libraries? ldconfig
1120. Which command can be used that will take immediate effect, to inactivate the password of a user who has quit? passwd -e
1121. Which command can be used to delete a variable? Unset
1122. Which command can be used to display both local and environment variables? Set
1123. Which command can be used to find the ports that are listening for connections on a host? netstat –l
1124. Which command can be used to set what your default permissions will be on new files? umask
1125. Which command can be used to view all open ports, along with the processes using them? netstat
1126. Which command can change the user owner of a file? chown
1127. Which command can you use to block packets to a specific host? route add with reject option
1128. Which command can’t be used to update user information in the /etc/passwd file? Finger
1129. Which command is used from the command line, to edit your disk’s partition table? fdisk
1130. Which command is used in order to view the manual page for a topic? man
1131. Which command is used to add private keys to the SSH agent’s repository? ssh-add
1132. Which command is used to assign a netmask to eth1? ifconfig eth1 netmask 255.255.255.224
1133. Which command is used to change permissions on a file? chmod
1134. Which command is used to create a logical volume? lvcreate
1135. Which command is used to create a physical volume? pvcreate
1136. Which command is used to create a volume group? vgcreate
1137. Which command is used to create or update the quota database files? quotacheck
1138. Which command is used to delete entries from the routing table? route del
1139. Which command is used to display the shared libraries of a dynamically linked executable? ldd
1140. Which command is used to find the current character mapping in Linux? locale charmap
1141. Which command is used to find the netmask of eth0 interface? ifconfig eth0
1142. Which command is used to generate a GnuPG key? gpg --gen-key
1143. Which command is used to keep the user’s account in a locked state? usermod –L
1144. Which command is used to keep track of suspicious connections? netstat
1145. Which command is used to list all available locales on the system? locale –a
1146. Which command is used to restart the network service on Red Hat systems? /etc/init.d/network restart
1147. Which command is used to set limits for user processes? ulimit
1148. Which command is used to setup broadcast addresses for a network interface? ifconfig
1149. Which command is used to unset the SUID bit from a file? chmod
1150. Which command is used to verify if a program is compiled with TCP Wrappers? ldd
1151. Which command is used to verify the signature of a package? gpg --verify pkg.sig
1152. Which command is used to verify time zone changes? date
1153. Which command is used to view the kernel’s routing table?
1154. Which command is used to view the services that are set to start or stop automatically? chkconfig
1155. Which command is used to view the summary of the RAM and swap space? free
1156. Which command makes it possible to ping all the hosts on a given subnet? nmap –sP
1157. Which command may be used to get a list of the installed Debian packages? dpkg -l
1158. Which command merges two files like related tables in a database? join
1159. Which command needs to be executed after modifying the LILO configuration file? lilo
1160. Which command performs globbing? The bash command
1161. Which command produces a list of users of groups and their quota statistics? repquota
1162. Which command shows the scripts that may be part of a RPM package? rpm -q –scripts
1163. Which command will allow you to change the group ownership of a file that you own? chgrp
1164. Which command will allow you to determine where the backup superblock is for a filesystem? dumpe2fs
1165. Which command will allow you to switch to another group and add files that are group owned by this other group? newgrp
1166. Which command will check the integrity of an RPM file? rpm -qKp
1167. Which command will create disk labels on an ext3 filesystem? e2label
1168. Which command will describe the mount options available for different filesystems? man mount
1169. Which command will display both the current runlevel and the previous runlevel? runlevel
1170. Which command will display more information about globbing? man 7 glob
1171. Which command will display the block size of a filesystem? tune2fs
1172. Which command will display UUIDs? blkid
1173. Which command will download RPM files from repositories? yumdownloader
1174. Which command will merge two files together line by line? paste
1175. Which command will remount the /data filesystem using the option from the /etc/fstab file? mount -o remount /data
1176. Which command will remove all files that belong to a Debian package? apt-get purge
1177. Which command will remove consecutive duplicate lines from a file? uniq
1178. Which command will send text to the terminal display: echo
1179. Which command will show the dependencies of a Debian package? apt-cache depends
1180. Which command will show the dependencies of an RPM package? rpm -qpR
1181. Which command will update the list of available packages for APT? apt-get update
1182. Which command would you use to set full permission for the owner and group and no permission to other users. chmod 770 /home/projects/os
1183. Which command you should input in order to take a value from user? Read
1184. Which command’s output includes the line: Interesting ports on hostname? nmap
1185. Which command’s output will include the ICMP sequence number field? ping
1186. Which commands can be used to change the ownership of a file? (choose two) chgrp; chown
1187. Which commands is used to find all files that have the SGID bit set? find / -type f -perm -2000
1188. Which configuration file is referred to for DNS resolution? /etc/resolv.conf
1189. Which df command option displays file type? -T
1190. Which directories are typically writable to all users? (choose two) /var/tmp; /tmp
1191. Which directories exist in the /etc/rc.d directory? rc0.d, rc1.d, rc2.d, rc3.d, rc4.d, rc5.d and rc6.d
1192. Which directory does not have to be a part of the root filesystem? /home
1193. Which directory is the root file system mounted on? /
1194. Which directory is used for the home directory of the root user? /root
1195. Which directory is used primarily for storing log messages? /var/log
1196. Which directory is used to store configuration files specific to the host? /etc
1197. Which directory is used to store essential libraries? /lib
1198. Which directory is used to store files representing attached devices? /dev
1199. Which directory is used to store temporary files? /tmp
1200. Which directory is used to store the kernel? /boot
1201. Which directory is used to store user home directories? /home
1202. Which directory represents the root of the primary filesystem hierarchy? /
1203. Which directory structure contains the bulk of the operating system’s files: /usr
1204. Which directory structure has directories which may have heavy activity for services like mail, ftp, httpd and printing? /var
1205. Which editing tool we use to edit registry? regedit.exe
1206. Which environment variable can a user set, that will affect where shared libraries can be located and loaded? LD\_LIBRARY\_PATH
1207. Which environment variable is used to find the time zone? TZ
1208. Which environment variable is used to specify the directories for message translation catalogs? NLSPATH
1209. Which expression prints out the result of an expression? expr
1210. Which file can you place in your home directory to be executed when you log off the system? ~/.bash\_logout
1211. Which file contains host and routing details of all configured network interfaces for Red Hat based systems? /etc/sysconfig/network
1212. Which file contains password for your group? /etc/gshadow
1213. Which file holds the list of the name servers? /etc/resolv.conf
1214. Which file is overwritten at the end of each boot process with the messages that were generated while booting? /var/log/dmesg
1215. Which file is referred to by the Name Service Switch (NSS) resolver? /etc/nsswitch.conf
1216. Which file is referred to on systems where DNS is not set up? /etc/hosts
1217. Which file is used for mapping the application services to their respective port numbers? /etc/services
1218. Which file is used to configure SSH clients? /etc/ssh/ssh\_config
1219. Which file is used to configure the sudo command? /etc/sudoers
1220. Which file is used to indicate the current time zone on Red Hat systems? /etc/sysconfig/clock
1221. Which file is used to set the user’s locale permanently? ~/.profile
1222. Which file is used to store limits for users so that the limits persist after system reboot? /etc/security/limits.conf
1223. Which file is used to verify the services specified in the inetd configuration? /etc/services
1224. Which file on the server holds the public keys of the hosts that need to be authenticated? /etc/ssh/ssh\_known\_hosts
1225. Which file provides persistent mapping of block devices to mount points? /etc/fstab
1226. Which file should be edited instead instead of changing the main configuration file for GRUB2? /etc/default/grub
1227. Which file specifies the processes to be started during boot time? /etc/inittab
1228. Which file stores the encrypted password? /etc/shadow
1229. Which file was used with GRUB before the grub.conf file? menu.lst
1230. Which file will be used to enable DHCP based configuration on Red Hat based systems? /etc/sysconfig/network-scripts/ifcfg-eth0
1231. Which files define the user’s password aging policy? /etc/login.defs and /etc/default/useradd
1232. Which glob character matches “exactly one character”? ?
1233. Which glob character matches “zero or more characters”? \*
1234. Which information is not stored in the /etc/shadow file? Default home directory
1235. Which is not a tool used for Debian package management? deb
1236. Which is the default configuration file used by GnuPG? ~/.gnupg/gpg.conf
1237. Which is the default runlevel for Debian based Linux systems? 2
1238. Which is the default user that su switches to? Root
1239. Which is the most commonly used character encoding for the Internet? UTF-8
1240. Which is the most useful command for managing password aging policy? chage
1241. Which is the standard port used for DNS service? 53
1242. Which is the standard port used for HTTP service? 80
1243. Which is true about hard links? They share inodes
1244. Which line executes the script check\_status.sh on 10th June 08:30 AM? 30 08 10 06 \* check\_status.sh
1245. Which Linux distributions are derived from Red Hat? (choose two) Fedora; CentOS
1246. Which mkdir option should be used to create parent directories (that don’t already exist) along with the specified directory? -p
1247. Which mke2fs option defines the block size of the filesystem? -b
1248. Which mke2fs option defines the percentage of the filesystem that is reserved for system use? -m
1249. Which mount option mounts a filesystem allowing both reading and writing? rw
1250. Which mount option mounts a filesystem allowing executable files? exec
1251. Which mount option mounts a filesystem allowing reading only? ro
1252. Which mount option mounts a filesystem allowing suid files? suid
1253. Which mount option will remount a currently mounted filesystem? mount -o remount
1254. Which of taking arfter considered substitutions for the conventional init process? (choose two) Upstart; Systemd
1255. Which of the configuration directives given below is not found in the /etc/resolv.conf file? parameters
1256. Which of the following algorithms are not supported by GnuPG for key generation? One-way Hash
1257. Which of the following applications can be used to “read” aloud the text from a file? All choices are valid
1258. Which of the following are advantages of using the find command? (choose two) It can search by file attribute types; Its results are always the most up-to-date
1259. Which of the following are advantages of using the locate command? It is quicker than the find comman
1260. Which of the following are benefits of a shared library: (choose two) Programs can be smaller; Programs use a more consistent base of code
1261. Which of the following are considered replacements for the traditional init process? (choose two) Upstart; Systemd
1262. Which of the following are mount options used for disk quotes? (choose two) usrquota; grpquota
1263. Which of the following are true about hard limits? (choose two) A user cannot exceed a hard limit; An error will appear on the screen if a user reaches the hard limit
1264. Which of the following are true about soft limits? (choose two) A warning will appear on the screen if a user reaches the soft limit; The grace period starts once the soft limit is reached
1265. Which of the following are valid command lines? (choose two) ls /etc –l; ls -l /etc
1266. Which of the following are valid Linux bootloaders? (choose two) GRUB; LILO
1267. Which of the following belong to user benefits? Safety; efficiency
1268. Which of the following belong(s) to system level interface? Invoked from programs
1269. Which of the following belongs to application benefits? Portability; programming simplicity
1270. Which of the following belongs to commercial business distribution used mainly for internet servers? Red Hat
1271. Which of the following belongs to user benefits? Efficiency safety
1272. Which of the following can be used to restart the HTTP service? (choose two) /etc/init.d/httpd restart; service httpd restart
1273. Which of the following changes is NOT possible by modifying various settings in the CUPS configuration file? Maximum number of printers that can be configured
1274. Which of the following characters can be used to negate (indicate NOT matching the following characters), when placed as the first of a set of characters enclosed in square brackets [] ? (choose two) !
1275. Which of the following commands are used to setup SSH tunneling? ssh –L
1276. Which of the following commands can be used to create an encrypted password that can be used with the password directive in GRUB Legacy: grub-md5-crypt
1277. Which of the following commands can be used to halt the system? (choose two) halt; poweroff
1278. Which of the following commands can be used to reboot the system? (choose two) shutdown –r; reboot
1279. Which of the following commands can be used to remove all the crontab entries? crontab –r
1280. Which of the following commands can be used to view the current contents of a crontab file? crontab –l
1281. Which of the following commands CANNOT be used to update user information in the /etc/passwd file? finger
1282. Which of the following commands could be used to extract the archive, example.tar? tar -xf example.tar
1283. Which of the following commands is not used to view log files on a Linux operating system? echo
1284. Which of the following commands is used as a traditional replacement for the init process? systemctl
1285. Which of the following commands is used to find all files that have the SGID bit set?
1286. Which of the following commands is used to telnet to port 33? telnet server\_name 33
1287. Which of the following commands is used to view the details of an external drive connected to a USB port? lsusb -v
1288. Which of the following commands is used to view the network interface controller connected on the PCI bus? lspci
1289. Which of the following commands is used to view the status of all services? systemctl –all
1290. Which of the following commands is used to view the summary of CPUs in the system? lscpu
1291. Which of the following commands will allow the root user to create a new group for the sales department and assign this new group the GID of 1250? groupadd sales\_group –g 1250
1292. Which of the following commands will allow you to add a physical volume to an existing volume group? vgextend
1293. Which of the following commands will allow you to backup a partition table to a file and restore it at a later time? sfdisk
1294. Which of the following commands will allow you to change the system runlevel, on a system with traditional init? (choose two) telinit; init
1295. Which of the following commands will allow you to change the system to another runlevel, on a system with Systemd? (choose two) systemctl; init
1296. Which of the following commands will create a hard link from the /tmp/test file to the /tmp/data file? ln /tmp/test /tmp/data
1297. Which of the following commands will create a soft link from the /tmp/test file to the /tmp/data file? ln -s /tmp/test /tmp/data
1298. Which of the following commands will display information about the Superblock? (choose two) tune2fs; dumpe2fs
1299. Which of the following commands will execute the last command that started with ec: !ec
1300. Which of the following commands will have the httpd service start at runlevel 5? ln -s /etc/init.d/httpd /etc/rc.d/rc5.d/S85httd
1301. Which of the following commands will produce the same result as start=`date` ? start=$(date)
1302. Which of the following commands will set the grace login period of 10 days after the password has expired? chage –I 10 temp\_user chage
1303. Which of the following commands will set the system time to the same time as the hardware clock? hwclock –s
1304. Which of the following commands will shut down the system? init 0
1305. Which of the following commands will start a SSH session with X11 support? ssh –X marks.gsource.com
1306. Which of the following commands will stop all processes owned by the user bob? (choose two) killall -u bob; pkill -u bob
1307. Which of the following commands will take the standard error of the ls command and put it into the /tmp/output.txt file: ls 2> /tmp/output.txt
1308. Which of the following commands will take the standard output of the ls and put it into the /tmp/output.txt file: ls > /tmp/output.txt
1309. Which of the following commands would display the libraries used by the /bin/ls command? ldd /bin/ls
1310. Which of the following condition is required for deadlock to be possible? mutual exclusion; no resource can be forcibly removed from a process holding it; a process may hold allocated resources while awaiting assignment of other resources
1311. Which of the following contents is in the ldconfig configuration file by default? include ld.so.conf.d/\*.conf
1312. Which of the following distribution designed for advanced Linux users? Gentoo
1313. Which of the following does not need a public IP address? User’s Computer Section
1314. Which of the following element of a computer system controls the operation of the computer and performs its data processing functions? Processor
1315. Which of the following element of a computer system moves data between the computer and its external environment? I/O modules
1316. Which of the following element of a computer system stores data and programs? Main memory
1317. Which of the following entries in /etc/ssh/sshd\_config turn on host based authentication? HostbasedAuthentication yes
1318. Which of the following entries in /etc/ssh/sshd\_config turn on SSH tunneling? AllowTcpForwarding yes
1319. Which of the following file t test statement conditions is NOTcorrect? -d filename tests if the file is in the current directory
1320. Which of the following files contains general and system related messages? /var/log/syslog
1321. Which of the following files is for all bash shell users and executed every time a bash shell is opened? /etc/bashrc
1322. Which of the following files is for all bash shell users and executed only at login? /etc/profile
1323. Which of the following files is specific to each user and executed every time a bash shell is opened? ~/.bashrc
1324. Which of the following files is specific to each user and executed only during login? ~/.bash\_profile
1325. Which of the following filesystems are good choices to implement disk quotas: (choose two) The /tmp filesystem; The /home filesystem
1326. Which of the following filesystems does not support journaling? ext2
1327. Which of the following functions is not a primary use of the tar command: Repair corrupted archives
1328. Which of the following functions is NOT provided by the printer service? Economizing use of the printer cartridge
1329. Which of the following info about users is not present in passwd file record? user’s password
1330. Which of the following information is NOT available in the output from the mailq command? Out time
1331. Which of the following information is not stored in the /etc/shadow file? Default home directory
1332. Which of the following is a non-interactive editor? sed
1333. Which of the following is a valid variable assignment? APP\_VAR=’zero’
1334. Which of the following is a valid way to add the /data directory to the existing PATH variable? PATH=$PATH:/data
1335. Which of the following is false about Subnet Mask? The function of a subnet mask is to determine whether an IP address exists on the local network or whether it must be router outside the local network
1336. Which of the following is NOT a capability of Unicode characters? Uses separate language packs for each language
1337. Which of the following is not a characteristic of firmware? Change runlevels
1338. Which of the following is not a common reason to create a partition? To increase fragmentation of free space across the disk
1339. Which of the following is NOT a component of the X Window system: Network manager
1340. Which of the following is NOT a core module of qmail? qmail-master
1341. Which of the following is not a criteria for defining access control using xinetd? Network Traffic
1342. Which of the following is not a daemon used for logging? ilogd
1343. Which of the following is not a function of nmap? Finding unreachable routes
1344. Which of the following is not a function of the date command? Sorting files by date
1345. Which of the following is not a function of the dmesg command? Add a new network interface
1346. Which of the following is not a function of the netstat command? View the route used by packets to reach a given destination
1347. Which of the following is not a function of the udev subsystem? Maintain log files
1348. Which of the following is not a function provided by GnuPG? Providing encrypted channel for communication
1349. Which of the following is NOT a group value function in SQL? REPEAT
1350. Which of the following is not a keyword used to specify the host in the hosts.allow and hosts.deny files? EXTERN
1351. Which of the following is not a Linux boot system? bootup
1352. Which of the following is not a mass storage device? Thunderbird
1353. Which of the following is not a probable reason for the Host unreachable error? Incorrect username/password used for login
1354. Which of the following is NOT a purpose for creating an alias? To make them run faster
1355. Which of the following is not a reason why the umount command may fail? There are symbolic links to files within the filesystem
1356. Which of the following is not a state of ports as reported by nmap? Suspended
1357. Which of the following is not a technique possible for I/O operations? Manual memory access
1358. Which of the following is not a valid argument for the dd command? in
1359. Which of the following is NOT a valid command for variable declaration? newvar –x ENV\_VAR=1
1360. Which of the following is NOT a valid option for executing a command that is not in the directories listed in the PATH variable? Rename the command and its directory
1361. Which of the following is not a valid option for the scripts in the /etc/init.d directory? query
1362. Which of the following is not a valid SQL keyword or SQL clause? INVERT
1363. Which of the following is NOT a valid variable name? 2\_VAR
1364. Which of the following is not a valid way to send the “force kill” signal to a process? kill -FORCE PID
1365. Which of the following is not an advantage of GRUB 2 over GRUB Legacy? Command-line interface
1366. Which of the following is not an authentication method supported by SSH? Signature Authentication
1367. Which of the following is not an open source database program? SQL Server
1368. Which of the following is not seen in the output of the locale command? LC\_PRINT
1369. Which of the following is not shown in the output of the ifconfig command? TTL
1370. Which of the following is not the state of a process? Old
1371. Which of the following is not true about kernel modules? They are plug and play hardware devices
1372. Which of the following is not true about the memory management? virtual memory is used only in multi-user systems
1373. Which of the following is not used for globbing? #
1374. Which of the following is placed before a script name to execute it from the current directory? ./
1375. Which of the following is the correct format for entries in the /etc/security/limits.conf file? <domain> <type> <item> <value>
1376. Which of the following is the subnet mask for Class B networks? 255.255.0.0
1377. Which of the following is TRUE about a primary key? Primary key column must be unique and cannot be NULL
1378. Which of the following is true about the fsck command? It should only be executed on unmounted filesystems
1379. Which of the following is used to define the start of the Apache web server for runlevels 2-4 in the /etc/init.d/apache2.conf file? enable runlevel [234]
1380. Which of the following is used to turn off the atd service at runlevels 2 and 4? chkconfig –level 24 atd off
1381. Which of the following items cannot be regulated using ulimit? Max. number of database sessions Max
1382. Which of the following keys is the opposite of Repeat Keys and should not be enabled at the same time as Repeat Keys? Slow keys
1383. Which of the following logger command options will use the message specified in the temp\_message file? logger – f temp\_message
1384. Which of the following man page sections will provide an example of how a command is executed? The SYNOPSIS section
1385. Which of the following meanings can a $ character assume within a regular expression? All of the above
1386. Which of the following options allows the cpio command to overwrite existing files? -u
1387. Which of the following options puts the cpio command in copy-out mode? -o
1388. Which of the following options puts the cpio command into copy-in mode? -i
1389. Which of the following options when used with cupsd ensures that cpusd runs as a foreground process detached from the controlling terminal? –F
1390. Which of the following options, when used with the mailq command, will resend the messages in the queue? –q
1391. Which of the following options, when used with the ntpd command, will perform a one time synchronization: –q
1392. Which of the following parameters is not referred by locale? Digital signatures
1393. Which of the following ports should be opened in the firewall to allow centralized logging? UDP 514
1394. Which of the following principles has Deadlock? Prevention, Avoidance, Detection and recovery
1395. Which of the following provides for communication among elements of a computer system? System bus
1396. Which of the following registers are used by the processor to exchange data with memory? MAR and MBR
1397. Which of the following registers are used by the processor to exchange data with input/output module? I/OAR and I/OBR
1398. Which of the following regular expression characters is an extended regular expression character? +
1399. Which of the following resources are used by devices to communicate with the system? IO Ports, IO Memory, Interrupts, and DMA Channels
1400. Which of the following scenarios do not require the use of the /etc/nologin file? Monitoring the system’s disk usage
1401. Which of the following selector settings in syslog.conf will select all kernel messages? kern.\*
1402. Which of the following settings in syslog.conf will enable syslogd to log messages of err priority level only? mail.=err
1403. Which of the following shortcuts will enable/disable Sticky Keys? Pressing the Shift key five times
1404. Which of the following should be used in order to display SQL results in ascending order of age? ORDER BY
1405. Which of the following SQL clauses is used to delete data from a database table? DELETE
1406. Which of the following state transitions is not possible? blocked to running
1407. Which of the following statements about CUPS Print Queues is correct? another CUPS printer server on the network
1408. Which of the following statements INCORRECTLY describes the WHERE clause? Wildcards cannot be used
1409. Which of the following statements is false: compaction does not involve relocation of programs; internal fragmentation is increased with small pages
1410. Which of the following statements is false? internal fragmentation is increased with small pages
1411. Which of the following statements is NOT true for exim? exim has three queues for storing messages temporarily
1412. Which of the following statements is NOT true regarding X Window: It specifies how windows and buttons should look
1413. Which of the following statements regarding cupsd is FALSE? Runs as multi-threaded server process
1414. Which of the following steps is NOT performed while creating a shell script? Login as root on the server console
1415. Which of the following switches will include the full path in the prompt? \w
1416. Which of the following user ID types is not supported by Linux? File
1417. Which of the following utility programs are not provided by OpenSSH? smv
1418. Which of the following will create a variable? VAR=value
1419. Which of the following will find and load shared libraries when a program is executed? The dynamic linker
1420. Which of the following will insert a record into a table named employee with empid and empname as columns? INSERT INTO EMPLOYEE VALUES ( 101,’Joe’);
1421. Which of the following will match files that have the string “hello” somewhere in the file name? echo \*hello\*
1422. Which of the following will mount an ISO file named cdrom.iso? mount -o loop cdrom.iso /mnt
1423. Which of the following will NOT handle bad user input properly: Checking the command’s Standard Output
1424. Which of the information listed below is not shown by the ping command? Route to the destination
1425. Which of the statements are not true about the routing table? The default gateway is not specified in the routing table
1426. Which of the taking after isn`t an advantage of GRUB 2 over GRUB Legacy? Command-line interface
1427. Which of these commands would return the files /etc/game.conf, /etc/file.conf and /etc/snap.conf (choose two) ls /etc/????.????; echo /etc/????.\*f
1428. Which of these functions have security risks? System()
1429. Which one of the following is a synchronization tool? Semaphore
1430. Which one of the following is the address generated by CPU? logical address
1431. Which one of the following is the deadlock avoidance algorithm? banker’s algorithm
1432. Which option for grep will invert the pattern matching results? -v
1433. Which option for the rm command will cause it to prompt before deleting files? –i
1434. Which option of the lspci command would you use to troubleshoot a network interface card? -nn
1435. Which option to the bzip2 command can be used for recursive compression? bzip2 doesn’t support recursive compression
1436. Which option to the bzip2 command can be used to report the compression ratio of an archive? -v
1437. Which option to the df command displays the number of inodes in a filesystem? -i
1438. Which option to the df command displays the size of a filesystem in “human readable” format? -h
1439. Which option to the df command shows “human readable” sizes? -h
1440. Which option to the df command shows how many inodes are free in a filesystem? -i
1441. Which option to the du command shows a summary of the space used in a directory structure? -s
1442. Which option to the du command will allow you to specify a subdirectory to not include in the results? –exclude
1443. Which option to the dumpe2fs command will have the command display only superblock information? -h
1444. Which option to the dumpe2fs command will have the command display only version information and bad block information? -b
1445. Which option to the e2fsck command allows you to specify an alternative superblock? -b
1446. Which option to the edquota command allows you to modify grace periods? -t
1447. Which option to the find command will display a “long listing” of matching files? -ls
1448. Which option to the find command will execute a command on each matching file without prompting the user? -exec
1449. Which option to the find command will prompt the user to execute a command on each matching file? -ok
1450. Which option to the find command will search by file type? -type
1451. Which option to the find command will search by name using a case-sensitive match? -iname
1452. Which option to the find command will search by name using a caseinsensitive match? -iname
1453. Which option to the find command will search by user owner? -user
1454. Which option to the fsck command forces a system check? -f
1455. Which option to the fsck command will allow you to specify the filesystem type? -t
1456. Which option to the fsck command will answer “no” to all queries? -n
1457. Which option to the fsck command will answer “yes” to all queries? -y
1458. Which option to the fuser command displays attempts to stop all processes using the filesystem? -k
1459. Which option to the fuser command displays verbose information about filesystem activity? -v
1460. Which option to the gzip command can be used to retain the uncompressed files when creating an archive? -c
1461. Which option to the locate command will have the command perform caseinsensitive searches? -i
1462. Which option to the logger command is used to specify a tag for the log entry? –t
1463. Which option to the ls command displays the inode numbers of files? -i
1464. Which option to the ls command will reverse the sort order? –r
1465. Which option to the ls command will sort the output by size instead of alphabetically? -S
1466. Which option to the ls command will sort the output by time-stamp? -t
1467. Which option to the quotaon command displays which filesystems have quotas turned on for? -p
1468. Which option to the tune2fs command will allow you to create a journal for an ext2 filesystem? -j
1469. Which option to the tune2fs command will change default mount options? -o
1470. Which option to the tune2fs command will change the space reserved for system use? -m
1471. Which option to the tune2fs command will display filesystem information? -l
1472. Which option to the unzip command can be used to estimate the size of an archive when it is decompressed? -l
1473. Which option to the zip command can be used to recursively compress multiple directories? -r
1474. Which option to the zip command will list its files without uncompressing them? -l
1475. Which option will mount a filesystem using the default mount options? defaults
1476. Which option(s) for the rm command can be used to delete directories that contain files? (choose two) –r; –R
1477. Which option, when used with useradd command, will display the default options that are used when creating a new user? –D
1478. Which options to the tune2fs command will change how often a full filesystem check is performed? (choose two) -i; -c
1479. Which passwd option use tp make the password empty for user Bob: -d Bob
1480. Which password is required for authentication to use su? Root Password
1481. Which password is required for authentication to use sudo? User’s Password
1482. Which permission belongs to 162 umask? rw--xr-x
1483. Which permission belongs to 260 umask r-x—xrwx
1484. Which permission belongs to 452 umask? -wx-w-r-x
1485. Which permission is necessary on a directory in order for a user to use the cd command to change that directory? Execute
1486. Which permission is used to make a directory so that only root, the owners of files or the owner of the directory can remove them? setgid
1487. Which process can be affected by other processes executing in the system? cooperating process
1488. Which protocol does the ping command use? ICMP
1489. Which protocol is used by the FTP daemon? TCP
1490. Which protocol uses a sequence number mechanism to ensure ordered delivery of data? TCP
1491. Which register contains condition codes set by the processor hardware as the result of operations? Program status word
1492. Which register contains the address of the next instruction to be fetched? program counter
1493. Which register contains the instruction most recently fetched? instruction register
1494. Which regular expression character matches any one character? .
1495. Which regular expression character matches one or more of the previous character? +
1496. Which regular expression character matches zero or more of the previous character? \*
1497. Which runlevel number characterizes multi-user with networking administrator and no GUI? 3
1498. Which runlevel number defines halting the system? 0
1499. Which runlevel number defines multi-user with GUI? 5
1500. Which runlevel number defines multi-user with networking services and no GUI? 3
1501. Which runlevel number defines multi-user with no networking services? 2
1502. Which runlevel number defines rebooting the system? 6
1503. Which runlevel number is defined as “user-definable”? 4
1504. Which script is executed when you exit the shell? ~/.bash\_logout
1505. Which signal is a program termination signal (kill will send this by default)? SIGTERM
1506. Which signal is sent to a process when its controlling terminal is closed? SIGHUP
1507. Which SQL statement is used to fetch data from a table in the database? SELECT
1508. Which standard is GnuPG based on? Pretty Good Privacy (PGP)
1509. Which super server has replaced inetd? xinetd
1510. Which table is the default table for handling network packets? filter
1511. Which table is used for specific types of packet alteration? mangle
1512. Which table used to alter packets that create a new connection? nat
1513. Which two arguments may the mount command require, in order to mount a filesystem? (choose two) The device pathname; A directory pathname
1514. Which two characters do you use to tell the command that you are finished providing options and that the remaining data on the command line is arguments? —
1515. Which two characters match “a single character from a set of specified characters”? []
1516. Which two characters represent the empty string? “”
1517. Which two commands will show detailed information about a Debian package? (choose two) apt-cache show; dpkg –s
1518. Which two directories are automatically searched for shared libraries? (choose two) /lib; /usr/lib
1519. Which two symbols can effectively redirect stdin to a command? (choose two) <
1520. Which type of access to the /etc/passwd file has a ordinary user (non root)? Read only
1521. Which type of link can be made to a file on another filesystem, hard or soft? soft
1522. Which type of link can be made to directories, hard or soft? soft
1523. Which type of link is easier to visually “see”, hard or soft? soft
1524. Which type of link is indistinguishable by programs from regular files, hard or soft? hard
1525. Which user information is missing from the passwd file record? The user’s password
1526. Which utility is used to determine the TZ variable’s value? tzselect
1527. Which utility is used to modify file /etc/sudoers? visudo
1528. Which value do you place in the dump field of the /etc/fstab for pseudofilesystems? 0
1529. Which value do you place in the fsck field of the /etc/fstab file for pseudofilesystems? 0
1530. Which value represents the hard link count in the following output of the ls -li command: 87589 -rw-r–r–. 2 root root 83 Mar 4 22:45 myhosts 2
1531. Which value represents the inode number in the following output of the ls -li command: 87589 -rw-r–r–. 2 root root 83 Mar 4 22:45 myhosts 87589
1532. While accessing mail through the mail command interface, a user sees 5 new messages in his mailbox. Since the second message appears important, he would like to read that message first. Which mail command should be used? 2
1533. While the printer testprinter was printing a job and had several others in the queue, Joe runs the command lpadmin –x testprinter . The effect of the command is: Printer testprinter gets deleted; All pending jobs in the queue are deleted; Current job is aborted
1534. Whitelisting is? create a list of permitted entities and blocking everything else
1535. Who can modified the /etc/passwd file? Root user
1536. Why is the SUID/SGID bit set for the chage command? To provide user access to files in the /etc directory that are otherwise accessible to root only
1537. Why should the files with SUID/SGID bits set be audited? The system administrator should be aware of such files since they make the system vulnerable
1538. Why to write Bash Scripts? All of the above
1539. Why to write Bash Scripts? Valuable to make our own commands; To computerize some task of day today life; Easy to use
1540. Why would you press CTRL+C when executing tail? To stop tail from following a file
1541. Why would you use sticky bits? To allow a user to execute as root without elevating privileges.
1542. With ……………. only one process can execute at a time; meanwhile all other process are waiting for the processor. With ………….. more than one process can be running simultaneously each on a different processor. Uniprogramming, Multiprocessing
1543. With disk quotas you can limit: (choose two) How many files a user can use in a filesystem; How much space a user can use in a filesystem
1544. With paging there is no \_\_\_\_\_\_\_\_ fragmentation. External
1545. With whom TCP/IP was driven? Kahn and Cerf
1546. Within square brackets, (Example: [?]) the ? character means: Match a ? character
1547. X Window defines the X11 protocol for communication and graphics primitives.True or False? True
1548. X Windows, the latest GUI server for Linux, is a desktop from Microsoft.True or False? False
1549. X86 Architecture means32 bit
1550. You are currently running the server at run level 3, you need to allow users access to X server applications for several days. Which run level should you switch to? Run level 5
1551. You are trying to telnet to a server and get a Host unreachable error. Which command will you use now to check the connectivity? ping
1552. You are using a server with two NICs, eth0 and eth1. You want to configure TCP Wrappers for using the telnet service on eth1 only in the hosts.allow file, this can be done by specifying \_\_\_\_: telnetd@192.168.0.254: 192.168.0.0/24
1553. You can combine glob characters in a single pattern, for example: a??\*[0-9]. True or False? True
1554. You can create your own real-time counter using … Performance Monitor
1555. You can display current filesystem space usage with the \_\_\_\_\_ command. Df
1556. You can pass arguments to long options by using which of the following techniques: (choose two) –option=argument; –option argument
1557. You had initially added some hosts in the hosts.deny file to prevent access to FTP. You remove those hosts now because you need to grant them FTP access. How do you restart TCP Wrappers? Restart of any service is not required
1558. You have an existing interface eth0 and have now added a new interface eth1. You notice that the count of RX and TX packets is 0 in the output of ifconfig . What does this indicate? The eth1 interface is not being used to route network traffic
1559. You have observed that your organization is not getting any incoming messages. What would be the most likely problem? Port 25 is not open on the firewall
1560. You just finished installing a new NIC and its driver, which command can you use to verify the interface details? ifconfig
1561. You log in to a server using telnet and bring down the eth0 interface (the only configured interface) using the ifdown command. What is the result of executing ifdown? The eth0 interface will be disabled and the telnet session will be terminated
1562. You need to enforce an organization’s policy of mandatory password changes every 90 days. Which command can you use for this? chage -M 90 user\_name
1563. You need to restart the network service and you are not the root user. Which command can you use? sudo
1564. You notice that the round trip time to a particular host is slowly increasing. Which command’s output has given you this information? ping
1565. You ping a host, which is currently not reachable because of some maintenance activity. You now try to add a route via this host since it will be available shortly. What will be the output of route add in this scenario? The route will be ignored and an error will be shown
1566. You want to execute the ls command with two options: -r and -l . Which of the following are valid ways to run this command: (choose three) ls -r –l; ls -l -r
1567. You want to switch the NIC cards of two servers currently in use. Which command will be used to disable the interfaces for this activity? ifdown
1568. Zones within firewalld are like\_\_\_\_in iptables: Zones
1569. **One of the jobs of the kernel is to:**
      * Transfer mail from one machine to another
      * Manage the system’s resources
      * Load the operating system after the computer is turned on
      * Turn source code into machine code
1570. **Question ID 3**

**Unix is:**

**(choose two)**

* + A distribution of Linux
  + A trademark
  + A text editor
  + An operating system
  + A type of hardware

1. **Question ID 5**

**Linux is written in:**

* + C
  + .NET
  + Java
  + Perl
  + C++

1. **Question ID 6**

**Source code refers to:**

* + The interface that software uses to talk to the kernel
  + The license that dictates how you may use and share the software
  + The version of a program that the computer runs on the CPU
  + A human readable version of computer software

1. **Question ID 7**

**Open source means:**

**(choose two)**

* + You must support the software you share
  + You can view the software’s source code
  + You cannot charge anything for the software
  + You must share your changes
  + You can modify the software’s source code

1. **Question ID 8**

**Most of the tools that are part of Linux systems come from:**

* + Google
  + Red Hat and Debian
  + The Open Source Initiative
  + The Linux foundation
  + The GNU project

1. **Question ID 10**

**The Linux platform that runs on mobile phones is called:**

* + IOS
  + Teldroid
  + LinuxMobile
  + Android
  + MicroLinux

1. **Question ID 11**

**What does a distribution provide to add and remove software from the system?**

* + Bash
  + Application Programming Interface (API)
  + Partitioning tool
  + Package manager
  + Compiler

1. **Question ID 12**

**The bootloader’s job is to:**

* + Load the application into memory
  + Assign initial settings such as network address
  + Install software from the Internet or removable media
  + Perform the initial installation of the kernel to hard drive
  + Load the kernel after the computer is powered on

1. **Question ID 13**

**UNIX was originally invented at:**

* + Stanford University
  + AT&T Bell Labs
  + Berkeley University
  + Xerox PARC
  + Bangalore University

1. **Question ID 14**

**A license where you don’t have access to the source code is called:**

* + Impaired source
  + Closed source
  + Open source
  + Sourceless

1. **Question ID 16**

**Which distributions are made by, or clones of, Red Hat?**

**(choose two)**

* + Fedora
  + Ubuntu
  + Slackware
  + Debian
  + CentOS

1. **Question ID 17**

**Ubuntu is derived from which distribution?**

* + Scientific Linux
  + Slackware
  + Fedora
  + Debian
  + Red Hat Enterprise Linux

1. **Question ID 19**

**Open source licenses differ, but generally agree that:**

**(choose two)**

* + You must redistribute your changes
  + You are not allowed to sell the software
  + You should be able modify the software as you wish
  + You should have access to the source code of software

1. **Question ID 20**

**Applications make requests to the kernel and receive resources, such as memory, CPU, and disk in return.**

**True or False?**

* + True
  + False

1. **Question ID 257**

**The most important consideration when choosing an operating system is:**

* + What the computer will do
  + The licensing model of the operating system
  + The operating system’s mascot
  + How much performance is needed
  + Whether or not it is cloud-friendly

1. **Question ID 258**

**Linux is not Unix because:**

* + It’s not good enough
  + It’s free
  + It’s not made by the Open Group
  + There are too many distributions
  + It hasn’t undergone certification

1. **Question ID 259**

**A release cycle:**

* + Is always 6 months
  + Doesn’t matter in an Open Source environment
  + Describes how long the software will be supported for
  + Describes how often updates to the software come out
  + Only applies to software you pay for

1. **Question ID 260**

**A maintenance cycle:**

* + Should be long so that you have time before you need to upgrade
  + Only has meaning for paid software
  + Should be short so you always have the freshest releases
  + Describes how often updates for software come out
  + Describes how long a version of software will be supported

1. **Question ID 261**

**If a software release is in a state in that it has many new features that have not been rigorously tested, it is typically referred to as beta software.**

**True or False?**

* + True
  + False

1. **Question ID 262**

**Software is backward compatible if:**

* + It still supports old file formats or applications
  + It can be upgraded without downtime
  + If the next version still works the same way
  + It works across Linux/Mac/Windows
  + People still use old versions

1. **Question ID 263**

**Apple’s OS X is:**

**(choose three)**

* + Derived from Linux
  + Only compatible with Apple hardware
  + Primarily used to manage network services
  + Certified as UNIX compatible
  + Derived from FreeBSD
  + Able to natively run Windows binaries

1. **Question ID 264**

**Microsoft Windows:**

**(choose three)**

* + Has a new desktop version every year.
  + Has a short maintenance cycle
  + Comes in desktop and server variants
  + Has built in virtualization
  + Has a Linux compatibility mode
  + Has powerful scripting capabilities

1. **Question ID 265**

**Other commercial Unixes:**

**(choose two)**

* + Are tied to their vendor’s hardware
  + Do not run the GNU tools
  + Are UNIX certified
  + Are almost obsolete
  + Use completely different commands than Linux

1. **Question ID 266**

**When choosing a distribution of Linux, you should consider:**

**(choose five)**

* + Which management tools are provided by the distribution
  + Whether or not the distribution is under active development
  + The maintenance cycle of the distribution
  + Popularity on social media.
  + If you need support on the distribution itself

1. **The Samba application is a:**
   * File Server
   * Web Server
   * Security Server
   * Mail Server
2. **Question ID 268**

**Which of the following are examples of desktop software?**

**(choose two)**

* + Web server
  + File share
  + Web browser
  + Music player
  + Compiler

1. **Question ID 269**

**If you wanted to set up a blog, which software would be most helpful?**

* + WordPress
  + MySQL
  + Samba
  + Postfix
  + Dovecot

1. **Question ID 270**

**Which of the following pieces of software deal with file sharing?**

**(choose three)**

* + Netatalk
  + NFS
  + X-Windows
  + Samba
  + PostgreSQL

1. **Question ID 271**

**If you wanted to create and print an invoice, which software could you use?**

* + Evolution
  + Firefox
  + GNOME
  + Compiz
  + LibreOffice

1. **Question ID 272**

**POP and IMAP are related to:**

* + Sharing files
  + Email
  + Reading and writing music
  + Serving web pages
  + Letting users log in to multiple servers with 1 set of credentials

1. **Question ID 273**

**When a computer boots, it can get its network information through:**

* + X11
  + DNS
  + DHCP
  + LDAP
  + SMTP

1. **Question ID 274**

**Which of the following are examples of text editors?**

**(choose four)**

* + pico
  + emacs
  + yum
  + vim
  + nano

1. **Question ID 275**

**A package manager:**

**(choose two)**

* + Downloads software from the Internet
  + Emails you when software is out of date
  + Keeps track of which files belong to which packages
  + Can optionally repartition your disk to make room for Linux
  + Performs a fresh install of Linux

1. **Question ID 276**

**An interpreted programming language:**

**(choose two)**

* + Takes fewer resources to run than a compiled language
  + Tends to offer more features than compiled languages
  + Is converted into machine specific instructions as the program runs
  + Requires a linking step but no compilation step
  + Requires a compilation step but no linking step

1. **Question ID 277**

**Which of the following are true about compiled programming languages?**

* + Compiled languages are great for system administration tasks like scripting
  + C is a compiled language
  + Ruby is a compiled language
  + Perl is a compiled language
  + A programmer is usually more productive when using a compiled language

1. **Question ID 279**

**Which package manager is used in Fedora, a Red Hat derived system?**

* + vim
  + tar
  + apt-get
  + bash
  + yum

1. **Question ID 280**

**The Linux shell:**

**(choose three)**

* + Has a scripting language
  + Has a built in text editor
  + Is responsible for tracking the location of configuration files
  + Is customizable
  + Allows you to launch programs

1. **Question ID 281**

**Which application would you use to edit and piece together sound files to make podcast?**

* + GIMP
  + Bash
  + Thunderbird
  + Audacity
  + Audiolicious

1. **Question ID 282**

**The two main families of Linux shells are:**

**(choose two)**

* + Python Shell
  + Korn shell
  + emacs
  + Bourne Shell
  + C Shell

1. **Question ID 283**

**Which server software would you use to create a company directory that you could search and authenticate against?**

* + ISC DHCP
  + Netatalk
  + OpenLDAP
  + bind
  + Samba

1. **Question ID 284**

**A Mail Transfer Agent’s primary purpose is to:**

* + Filter out spam
  + Manage the end user’s inbox
  + Serve email to end clients
  + Deliver mail between servers
  + Act as a gateway between faxes and email

1. **Question ID 285**

**Which of the following are examples of a web server?**

**(choose two)**

* + postfix
  + NFS
  + Nginx
  + WordPress
  + Apache

1. **Question ID 286**

**If you wanted to let a Linux machine share files with Windows clients and servers, you would use:**

* + Netatalk
  + DNS
  + Samba
  + NFS
  + bind

1. **Question ID 287**

**Richard Stallman is associated with:**

* + The Open Source Initiative
  + Microsoft
  + The Free Software Foundation
  + BSD Unix
  + The Apache foundation

1. **Question ID 288**

**A “copyleft provision” in a software license means:**

* + If you redistribute the software, you must distribute the source to any changes you make
  + You may not link against third party closed source software
  + You must provide free copies of the software if you use it
  + You must provide support for your modifications
  + You give up your copyright to the software

1. **Question ID 289**

**The largest difference between the GPLv2 and BSD licenses is:**

* + GPLv2 is not approved by the OSI
  + Only BSD allows commercial use
  + Nothing, they are virtually identical
  + BSD has no copyleft provision
  + GPLv2 requires assigning copyright to the FSF

1. **Question ID 290**

**The Free Software Foundation believes that:**

**(choose two)**

* + Software should be free to modify
  + No money should ever change hands
  + Software should be free to share
  + People should write software with no expectation of making money
  + Software should not have copyright

1. **Question ID 291**

**Which of the following licenses was made by the FSF?**

* + MIT
  + BSD
  + GPLv3
  + Creative Commons
  + Apache

1. **Question ID 292**

**A permissive free software license:**

**(choose two)**

* + Means you can use the software for anything you want
  + Does not allow the software to be locked to certain hardware
  + Places no restrictions on sharing modifications
  + Places the software in the public domain
  + Requires you share software changes but not binaries

1. **Question ID 293**

**Linux is distributed under which license?**

* + Linux Foundation
  + MIT
  + BSD
  + GPLv2
  + GPLv3

1. **Question ID 294**

**Who founded the Open Source Initiative?**

**(choose two)**

* + Richard Stallman
  + University of California at Berkeley
  + Eric Raymond
  + Linus Torvalds
  + Bruce Perens

1. **Question ID 295**

**A generic term for Open Source and Free Software is:**

* + SLOFF
  + Libre Software
  + FLOSS
  + GPL
  + OS/FS

1. **Question ID 296**

**Which are examples of permissive software licenses?**

**(choose two)**

* + GPLv3
  + GPLv2
  + LGPLv3
  + MIT
  + BSD

1. **Question ID 297**

**What does it mean when a work is placed in the public domain?**

* + The work was done by a government agency
  + The author has died
  + You must redistribute changes to the software
  + You may not use the work for commercial purposes
  + The author has relinquished the copyright on the work

1. **Question ID 298**

**Creative Commons licenses allow you to:**

**(choose three)**

* + Specify whether or not people may distribute changes
  + Receive royalties on the use of the work
  + Specify whether or not changes must be shared
  + Allow or disallow commercial use
  + Get a veto on where the work is used

1. **Question ID 299**

**If a podcast is licensed under the CC BY-ND license, you may:**

**(choose two)**

* + Use an interview or song from it for your own podcast
  + Post it to your website
  + Add ads to it and post it to your website.
  + Share it as long as you give credit to the author
  + Sell it as part of a compilation

1. **Question ID 300**

**How can you make money from open source software?**

**(choose three)**

* + Charge a yearly fee for the right to use the software
  + Take payments for fixing bugs
  + Sell hardware that’s built to work with the software
  + Provide paid consulting services for users
  + Unlock premium features for people that pay

1. **Question ID 301**

**To place software under an open source license, you must give up your copyright.**

**True or False?**

* + True
  + False

1. **Question ID 302**

**The difference between the GPL and LGPL licenses are:**

* + LGPL is shorter than GPL
  + LGPL allows linking to non GPLed software
  + LGPL applies to web services
  + LGPL was made by the OSI while GPL was made by the FSF
  + LGPL allows you to distribute the software in binary-only form

1. **Question ID 303**

**Permissive free software licenses:**

**(choose three)**

* + Are not approved by the OSI
  + Are not approved by the FSF
  + Include the GPLv2 and BSD
  + Can allow software to be used inside closed source software
  + Don’t have a copyleft provision

1. **Question ID 304**

**The Creative Commons version of Public Domain licensing is:**

* + Attribution-NonCommercial-ShareAlike
  + Attribution-NonCommercial
  + Attribution
  + NoAttribution-ShareAlike
  + No Rights Reserved

1. **Question ID 305**

**Your company makes a hardware firewall that runs a custom Linux kernel. What are your obligations under GPLv2?**

* + You must ensure your custom kernel runs on a regular Intel machine
  + You must make the source to your kernel available
  + There are no requirements
  + You must make the source to your custom web interface available
  + You must make your hardware designs available

1. **Question ID 306**

**Participating in open source projects can improve your technical skills, even if it is not your day job.**

**True or False?**

* + True

1. **Question ID 307**

**Which of the following is true about graphical mode?**

**(choose three)**

* + You cannot use your mouse
  + You have menus and tools to help you find what you are looking for
  + After login, you are provided with a command prompt
  + After login, you are provided with a desktop
  + You access this mode by logging into a graphical display

1. **Question ID 308**

**Which of the following is provided by a graphical interface that isn’t normally provided to a non graphical interface?**

**(choose four)**

* + Windows
  + Desktop
  + Menus
  + Popups
  + Shell

1. **Question ID 309**

**A server is likely to be running in graphical mode.**

**True or False?**

* + True
  + False

1. **Question ID 310**

**In graphical mode, you can get to a shell by running which applications?**

**(choose two)**

* + gbash
  + guiterm
  + terminal
  + xterm
  + xconsole

1. **Question ID 311**

**Which of the following are traits of a multiuser operating system?**

**(choose three)**

* + Each user can only log in once per day
  + Users can protect their information from other users
  + Many users can log in simultaneously with a unique account
  + An administrative user gets a dedicated CPU
  + Resources are shared between users

1. **Question ID 312**

**Virtualization means:**

* + A single host can be split up into multiple guests
  + A user can connect to a server over the network and use a virtual console
  + A machine can swap memory to disk
  + Many users can share one hard drive
  + Two users get different memory spaces on the same machine

1. **Question ID 313**

**In virtualization, what are the host and guest?**

**(choose two)**

* + The host is the machine that runs the virtual machines
  + A host is a virtual machine
  + The terms can be used interchangeably
  + A guest is a virtual machine
  + The guest is the machine that runs the virtual machines

1. **Question ID 314**

**Which of the following are traits of cloud computing?**

**(choose two)**

* + You own the hardware but pay for it over time
  + You pay for what you use
  + Only Linux works in cloud computing
  + You don’t have to worry about performance any more
  + The resources are virtualized

1. **Question ID 315**

**If you wanted to write a report that was to be printed, you would probably use:**

* + Chrome
  + A wiki
  + Adobe Flash
  + LibreOffice
  + Firefox

1. **Question ID 316**

**If you want to store logins and passwords for different websites in a secure manner, you could use:**

* + Firefox
  + A LibreOffice Document
  + KeePassX
  + A sticky note on your monitor
  + A text file in your home directory

1. **Question ID 317**

**You can configure your computer to check for updates automatically.**

**True or False?**

* + True
  + False

1. **Question ID 319**

**Two components that provide the ability to implement a firewall include:**

**(choose two)**

* + ipfw
  + iptables
  + Cerberus
  + Uncomplicated Firewall
  + gufw

1. **Question ID 322**

**What are tradeoffs of increasing the level of privacy you have in your web browser?**

**(choose two)**

* + Sites may not work properly
  + Images won’t load properly
  + You may get viruses
  + Websites may load slower
  + You may have to explicitly permit some cookies to be saved

1. **Question ID 323**

**Which of the following is a tool that helps you anonymize your Internet browsing?**

* + The onion router
  + iptables
  + AnonFirefox
  + Web proxy
  + CookieCleaner

1. **Question ID 324**

**Social network “like” buttons can track your activity across the Internet.**

**True or False?**

* + True
  + False

1. **Question ID 325**

**Which of the following are properties of a strong password?**

**(choose three)**

* + A mix of upper and lower case
  + Includes symbols
  + Long so that it can be reused on multiple sites
  + At least 10 characters long
  + Based on easy to remember items like birthdays

1. **Question ID 326**

**What can be done to prevent remote people from running programs on your computer?**

**(choose two)**

* + Use strong passwords on all user accounts
  + Block all cookies
  + Turn on a firewall
  + Don’t use wireless netw

1. **Select all the applications that provide access to the Command Line Interface (CLI)?**

**(choose two)**

* + opera
  + Virtual Terminal
  + Terminal window
  + firefox

1. **Question ID 328**

**Which environment variable contains a list of directories that is searched for commands to execute?**

* + PATH
  + PS2
  + PS1
  + EXEC

1. **Question ID 329**

**Select the command that can report the location of a command:**

* + what
  + where
  + which

1. **Question ID 331**

**A pair of single quotes ( ‘ ) will prevent the shell from interpreting any metacharacter.**

**True or False?**

* + True
  + False

1. **Question ID 332**

**A pair of double quotes ( ” ) will prevent the shell from interpreting any metacharacter.**

**True or False?**

* + True
  + False

1. **Question ID 333**

**Using a pair of back quotes ( ` ) will cause a shell to execute the back-quoted text as a command and substitute the output back into the original command.**

**True or False?**

* + True
  + False

1. **Question ID 334**

**Which of the following are glob characters?**

**(choose three)**

* + The asterisk “\*”
  + The question mark “?”
  + The dash character “-“
  + The square brackets “[” and “]”

1. **Question ID 337**

**The semicolon “;” can be used to separate multiple commands to be executed in order.**

**True or False?**

* + True
  + False

1. **Question ID 338**

**The double ampersand characters ( && ) are used to separate commands to be executed conditionally, where if the command to the left of the ampersands fails, then the command to the right of the ampersands will be executed.**

**True or False?**

* + True
  + False

1. **Question ID 339**

**To be able to output messages to the screen, use the \_\_\_\_\_\_\_ command:**

* + display
  + type
  + print
  + echo

1. **Question ID 340**

**The \_\_\_\_\_\_\_ command will print a list of the commands that you’ve previously executed.**

* + eval
  + history
  + list
  + exec

1. **Question ID 341**

**To execute the same command as previously executed five commands ago, you would type:**

* + &5
  + !-5
  + @-5
  + !5

1. **Question ID 342**

**The shell program interprets the commands you type into the terminal, into instructions that the Linux operating system can execute.**

**True or False?**

* + True
  + False

1. **Question ID 343**

**The acronym CLI stands for:**

* + Command Line Interpreter
  + Computer Link Interpreter
  + Computer Line Interface
  + Command Line Interface

1. **Question ID 344**

**Traditional UNIX command options used a single dash, like -a; \_\_\_\_\_\_\_ command options use two dashes like –all.**

* + LINUX
  + Kernel
  + GNU
  + shell

1. **Question ID 345**

**The acronym GNU stands for:**

* + Gnu’s Not Unix
  + Good News Unix
  + Gnu’s Nearly Unix
  + Go Next Unit

1. **Question ID 346**

**What one character treats the character that follows it as if it was surrounded by single quotes?**

* + #
  + /
  + %
  + \

1. **Question ID 347**

**The main purpose of using glob characters is to be able to provide a command a list of filenames.**

**True or False?**

* + True
  + False

1. **What is the standard option to provide a command line program to view its documentation?**
   * –help
   * –info
   * –doc
   * -h
2. **Question ID 23**

**The command man -k is the same as the command apropos.**

**True or False?**

* + True
  + False

1. **Question ID 24**

**The whatis command is the same as man -w.**

* + True
  + False

1. **Question ID 26**

**The directory where additional documentation for software packages most likely can be found is:**

* + /usr/share/doc
  + /usr/software/doc
  + /var/lib/doc
  + /var/share/doc

1. **Question ID 27**

**Which two pager commands are used by the man command to control movement within the document?**

**(choose two)**

* + less
  + grep
  + more
  + page

1. **Question ID 28**

**Commands typically executed by a user are covered in what section of the manual?**

* + 5
  + 1
  + 2
  + 3

1. **Question ID 29**

**To search the man page sections for the keyword example, which of the following command lines could you execute?**

**(choose two)**

* + man -f example
  + man -k example
  + whatis example
  + apropos example

1. **Question ID 30**

**The statement that describes the difference between a man page and an info page is:**

* + The info page is like a guide; a man page is a more concise reference.
  + The man page is a long detailed reference; the info page is very terse.
  + There is very little difference between them.
  + The man page is like a guide; the info page is a more concise reference.

1. **Question ID 31**

**If you are reading the synopsis of a command from a man page, then items in square brackets are:**

* + Optional
  + Comments
  + Required options
  + Required arguments

1. **Question ID 32**

**The following sections commonly appear on a man page:**

**(choose three)**

* + DESCRIPTION
  + LICENSE
  + SYNOPSIS
  + NAME

1. **Question ID 33**

**Section 5 of the manual pages covers:**

* + User commands
  + Games
  + File Formats
  + System administration commands

1. **Question ID 34**

**To start searching a man page, the first key you press is:**

* + s
  + !
  + /
  + f

1. **Question ID 35**

**In order to exit viewing a man page, press:**

* + y
  + Z
  + x
  + q

1. **Question ID 36**

**Which option for the man command should you use if you intend to send the output of the command to a printer?**

* + -T
  + –text
  + -t
  + -m

1. **Question ID 37**

**What key should be used while working in the man command if you want to go to the end of the document?**

* + g
  + e
  + G
  + goto

1. **Question ID 38**

**To get help on using the info command, execute:**

**(choose two)**

* + info -q
  + info info
  + man info
  + help info

1. **Question ID 39**

**To get help while using the info command, press:**

* + g
  + z
  + a
  + h

1. **Question ID 40**

**To exit the info page, press:**

* + X
  + x
  + q
  + z

1. **Question ID 41**

**In order to search an info page, the first key to press is:**

**(choose one)**

* + f
  + t
  + s
  + g

1. **Question ID 42**

**To go to the end of an info page, press:**

* + N
  + END
  + ]
  + n

1. **Question ID 43**

**To go to the next match of a search on a man page, press:**

* + N
  + ]
  + }
  + n

1. **Question ID 44**

**When interpreting the SYNOPSIS of a command found on a man page, the “|” means:**

* + The items it separates cannot be used together
  + The items it separates can be used together

1. **Question ID 45**

**After performing a search, you can use the \_\_\_\_ key to return to a previously found match:**

* + N
  + U
  + n
  + D

1. **Question ID 46**

**To move a page forward one at a time while viewing a man page, press the following:**

* + Spacebar
  + m
  + Enter
  + **Hidden files are files that begin with what character?**
    1. A dash (-)
    2. A plus (+)
    3. A period (.)
    4. An asterisk (\*)
  + **Question ID 48**

**What option for the ls command will display all files, including hidden files?**

* + 1. -L
    2. -H
    3. -w
    4. -a

* + **Question ID 49**

**The top-level directory on a Linux system is represented as:**

* + 1. /
    2. C:
    3. /home
    4. /root
  + **Question ID 50**

**Is the following path absolute or relative?**

***/etc/ppp***

* + 1. Absolute
    2. Relative

* + **Question ID 51**

**Is the following path absolute or relative?**

***sysadmin/Documents***

* + 1. Relative
    2. Absolute
  + **Question ID 52**

**Is the following path absolute or relative?**

***../../home/sysadmin***

* + 1. Relative
    2. Absolute

* + **Question ID 53**

**The tilde (~) is used to represent:**

* + 1. A user’s home directory
    2. Any two single characters
    3. The directory above the current working directory
    4. Nothing; it has no special meaning
  + **Question ID 54**

**Which of the following commands can be used to access the home directory of the user “bob” while logged in as root?**

**(choose two)**

* + 1. cd /home/bob
    2. cd ~bob
    3. cd &&
    4. ~bob

* + **Question ID 55**

**The double dot (..) can be used with the cd command to represent:**

* + 1. The directory above the current working directory
    2. Nothing; it has no special meaning.
    3. Any two single characters
    4. A user’s home directory.
  + **Question ID 56**

**The cd command by itself will take you to what directory?**

* + 1. The system root directory
    2. None; it is not a valid command
    3. The directory above the current working directory
    4. Your home directory

* + **Question ID 57**

**What command will allow you to change your current working directory?**

* + 1. chdir
    2. list
    3. cd
    4. ls
  + **Question ID 58**

**The double dot (..) can be used to represent the directory…**

* + 1. …above the current directory.
    2. …below the current directory.
    3. …with any two single numbers.
    4. …above the current directory only when using the cd command.
  + **Question ID 59**

**The ls command without options or arguments…**

* + 1. …generates an error as this command requires arguments.
    2. …lists the contents of the current directory.
    3. …prompts for a directory to list.
    4. …lists the contents of a user’s home directory.

* + **Question ID 60**

**The first character in a long listing (ls -l) indicates:**

* + 1. The permissions
    2. If something is a file, directory, or symbolic link
    3. The owner
    4. The size
  + **Question ID 61**

**Which option for the ls command, when used in conjunction with the -l option, will display human-readable sizes?**

* + 1. -M
    2. -S
    3. -H
    4. -h

* + **Question ID 62**

**Which of the following commands will prevent any aliased options to the ls command?**

* + 1. /ls
    2. %ls
    3. %ls
    4. ls
  + **Question ID 63**

**The ls command color codes results by default.**

**True or False?**

* + 1. True
    2. False
  + **Question ID 64**

**The command ls -S will sort files:**

* + 1. By size, smallest to largest
    2. By number of symlinks, largest to smallest
    3. By modification date, newest to oldest
    4. By size, largest to smallest
  + **Question ID 65**

**When using the cp command, you must provide both a source and a destination.**

**True or False?**

* + 1. True
    2. False
  + **Question ID 66**

**Which option(s) can be used to prevent cp from overwriting an existing file?**

**(choose two)**

* + 1. -n
    2. -N
    3. -z
    4. -i
  + **Question ID 67**

**The command rm -r will…**

* + 1. remove a directory along with any files or subdirectories.
    2. prompt for each confirmation before deleting each file in a directory.
    3. remove only empty directories.
    4. generate an error; -r isn’t a valid option.
  + **Question ID 68**

**Which option can be used with the rm command to prompt before deleting?**

* + 1. -i
    2. I
    3. -P
    4. A
  + **Question ID 69**

**The rm command can delete multiple files at once.**

**True or False?**

* + 1. True
    2. False
  + **Question ID 70**

**Which of the following commands can be used to rename a file?**

* + 1. name
    2. mv
    3. rn
    4. cp
  + **Question ID 72**

**The touch command can be used to:**

**(choose two)**

* + 1. Create new files
    2. Change a file’s name
    3. Update the time stamp of existing files
  + **Compression on a file works by:**
    - Removing redundant information
    - Eliminating gaps within the file
    - Storing most of the data on removable media and just leaving a pointer
    - Consolidating multiple files into one
    - Removing the high order bit from each byte
  + **Question ID 75**

**In general, for which of the following would you want to use lossless compression?**

* + - A log file
    - A movie
    - A JPEG image
    - An mp3 audio file
    - An encrypted email

* + **Question ID 76**

**Lossy compression:**

**(choose three)**

* + - Decompresses to an identical version as the original
    - Is often used with documents
    - Is often used with images
    - Usually results better compression than lossless
    - Sacrifices some quality
  + **Question ID 77**

**You type *gzip myfile.tar*. What happens?**

**(choose two)**

* + - myfile.tar is removed
    - myfile.tar.gz holds a compressed version of myfile.tar
    - An error; you forgot to specify the file with –f
    - myfile.tar is unarchived into the current directory
    - An error; you forgot to pass the name of the output file

* + **Question ID 78**

**How would you obtain output similar to the following?**

**compressed​​     ​​​uncompressed     ratio        uncompressed\_name**

**278168                1016950                  72.6%           tags**

* + - gunzip –t tags
    - file tags
    - gzip –l tags
  + **Question ID 79**

**Which command would you use to archive the Documents directory and compress it with bzip2 compression?**

* + - tar –czf documents.tbz Documents
    - tar –cjf Documents
    - tar –fzc Documents documents.tbz
    - tar –cjf documents.tbz Documents
    - tar –cf Documents documents.tbz

* + **Question ID 80**

**Which flag would you pass to tar in order to have it make a new archive?**

* + - –t
    - -c
    - –j
    - -x
    - –n
  + **Question ID 81**

**Which command will show what is inside the compressed tarball with a name of *foo.tar.gz*?**

* + - tar –tjf foo.tar.gz
    - tar –tzf foo.tar.gz
    - tar –lf foo.tar.gz
    - tar –xf foo.tar.gz
    - tar –tf foo.tar.gz

* + **Question ID 82**

**In the command*tar –cvjf foo.tbz a b c*, what are a, b, and c?**

* + - File names to be added to the archive
    - Matching operators; anything starting with a, b, or c will be added
    - a is the directory that will be prepended to files; b and c are files inside it
    - Extra flags passed to tar
    - Nothing; -cvjf only expects one parameter
  + **Question ID 83**

**Given the command *tar –cvjf homedirs.tbz /home*, which of the following are true?**

**(choose two)**

* + - The /home directory will be restored with the contents of homedirs.tbz
    - Only files starting with /home will be extracted from the archive
    - The command will print out each filename as it is processed
    - Files that are present in the archive might overwrite files in /home
    - The output file will be compressed
  + **Question ID 84**

**You archived your users’ directories into a file called backup.tar.gz. You then view the archive and see the filenames follow this convention:**

***home/username/somefile***

* + - How will you extract just the files for the user called fred?
    - tar –tzf /home/fred < backup.tar.gz
    - tar –tjf backup.tar.gz /home/fred
    - tar –xjf backup.tar.gz home/fred/
    - tar –xzf backup.tar.gz home/fred/
    - tar –xzf backup.tar.gz fred
  + **Question ID 85**

**Which of the following commands will create a zipfile with the contents of your Documents directory?**

* + - zip –cf mydocs.zip Documents
    - zip –c mydocs.zip Documents
    - zip -r mydocs.zip Documents
    - zip mydocs.zip Documents
    - zip –f mydocs.zip Documents
  + **Question ID 86**

**Given a file called documents.zip, how can you see what’s in it without extracting the files?**

* + - showzip documents.zip
    - zip –lf documents.zip
    - zip –l documents.zip
    - unzip –list documents.zip
    - unzip –l documents.zip
  + **Question ID 87**

**Given a file called documents.zip, how can you extract just the files under ProjectX?**

* + - zip –x documents.zip ProjectX
    - unzip documents.zip | grep ProjectX
    - unzip –t documents.zip ProjectX
    - unzip documents.zip ProjectX
    - unzip documents.zip ProjectX/\*
  + **Question ID 88**

**You try to compress a file that is already compressed. Which of the following statements is true?**

* + - The file will not be compressed any further than it already was
    - The compression algorithm needs to be set to the “currently compressed” mode for it to be compressed further
    - The file will actually be uncompressed
    - The file will be deleted
    - The file changed while you were compressing it
  + **Question ID 89**

**Which of the following commands can be used to compress a file?**

**(choose three)**

* + - bunzip2
    - bzip2
    - gzip
    - cat
    - zip
  + **Question ID 90**

**The three main modes of tar are:**

**(choose three)**

* + - Copy
    - List
    - Compress
    - Create
    - Extract
  + **Question ID 91**

**In the command *tar –czf foo.tar.gz bar*, what is the purpose of the f flag?**

* + - Tells tar to read from the file that follows the flag
    - Tells tar to print the name of each file as it is processed
    - Tells tar to copy only files, and not directories
    - Specifies extra compression is to be used
    - Tells tar to write to the file that follows the flag
  + **Question ID 92**

**Which two commands do the same thing?**

**(choose two)**

* + - tar –czf foo.tar.gz foo
    - tar –c foo | gzip > foo.tar.gz
    - tar –xzf foo.tar.gz
    - tar –x foo | gzip
    - tar –tzf foo.tar.gz
  + **Question ID 902**

**The \_\_\_\_\_ command is normally executed daily to update the database of all files that are on the system.**

* + - updatedb
    - search

1. **rror messages generated by commands are sent where by default?**
   * Log files
   * STDOUT
   * STDERR
   * STDIN
2. **Question ID 94**

**A successful command will print output to STDOUT.**

**True or False?**

* + True
  + False

1. **Question ID 95**

**Which of the following commands will direct error messages to the file, error.log?**

**(choose one)**

* + ls /root >> error.log
  + ls /root 2> error.log
  + ls /root $> error.log
  + ls /root > error.log

1. **Question ID 96**

**A pipe allows you to…**

* + …send the same input to multiple commands.
  + …type multiple commands at one prompt.
  + …send the output of one command to another.
  + …send the output of a command to a file.

1. **Question ID 97**

**Channel 2 is:**

* + STDIN
  + STDALL
  + STDOUT
  + STDERR

1. **Question ID 98**

**Which of the following commands will append its output to output.file?**

* + echo Testing > output.file
  + echo Testing >> output.file
  + output.file < echo Testing
  + echo Testing -> output.file

1. **Question ID 99**

**Which command(s) can be used to sort the lines of list.file alphabetically and display it on the screen?**

**(choose two)**

* + sort < list.file
  + cat list.file | sort
  + cat list.file >> sort
  + echo list.file > sort

1. **Question ID 100**

**Which option of the head command will display only the first five lines of a file?**

* + -l 5
  + No option needed; head displays only five lines by default.
  + -n
  + -n 5

1. **Question ID 101**

**The grep command…**

* + …will display all the lines that begin with the specified Regular Expression.
  + …is not case sensitive.
  + …will display all the lines in a file containing the specified Regular Expression.
  + …will display the line numbers in a file that contain a specified Regular Expression.

1. **Question ID 102**

**The grep command can be used with glob characters.**

**True or False?**

* + True
  + False

1. **Question ID 103**

**Which of the following commands will display only lines that begin with start?**

* + grep \*start file.txt
  + grep $start file.txt
  + grep start file.txt
  + grep ^start file.txt

1. **Question ID 104**

**Which of the following commands will display only lines that begin with test?**

* + grep ^test file.txt
  + grep $test\* file.txt
  + grep \*test file.txt
  + grep &test file.txt

1. **Question ID 105**

**Which of the following commands will display lines that contain either start or end?**

* + egrep start end file.txt
  + egrep ‘start|end’ file.txt
  + egrep start&end file.txt
  + egrep (start|end) file.txt

1. **Question ID 106**

**Which of the following commands can be used to scroll through a text file?**

**(choose two)**

* + some
  + less
  + cat
  + more

1. **Question ID 107**

**The find command can search for files based on the size of the file.**

**True or False?**

* + True
  + False

1. **Question ID 108**

**Which of the following commands scans the file to determine file locations?**

* + search
  + locate
  + where
  + find

1. **Question ID 109**

**Which option for the cut command is used to specify a delimiter?**

* + -f
  + -d
  + =
  + -D

1. **Question ID 110**

**Which option for the cut command is used to specify the field?**

* + -D
  + -f
  + -d
  + #

1. **Question ID 111**

**Which option for the wc command will print the number of lines in a file?**

* + -l
  + -w
  + -C
  + -L

1. **Question ID 112**

**Which option for the wc command will print the total number of words in a file?**

* + -l
  + -L
  + -C
  + -w

1. **Question ID 113**

**Which command can be used to print line numbers?**

* + num
  + sort
  + ln
  + nl

1. **Question ID 114**

**The command echo “text” > file.txt will create file.txt if it does not already exist.**

**True or False?**

* + True
  + False

1. **Question ID 11**
2. **The command echo “text” > file.txt will not overwrite file.txt if it already exists.**

**True or False?**

* + True
  + False

1. **Question ID 116**

**The command echo “text” >> file.txt will not overwrite file.txt if it already exists.**

**True or False?**

* + True
  + False

1. **The echo command:**
   * Is used for variable assignment
   * Duplicates the input stream to the output stream
   * Is used to output text to the console
   * Tests a variable for duplication
   * Copies variables from one to another
2. **Question ID 118**

**A file begins with #!/bin/csh. This means:**

* + Nothing, this is a comment
  + C Shell compatibility mode is enabled
  + The operator should not be using /bin/csh
  + Running the script will invoke /bin/csh to interpret the rest of the file
  + This is a Perl script

1. **Question ID 119**

**Which are appropriate editors for writing shell scripts?**

**(choose two)**

* + /bin/bash
  + vi
  + LibreOffice Writer
  + Firefox
  + nano

1. **Question ID 120**

**Most of nano’s commands take the form of:**

* + Control and another character
  + Alt and another character
  + Mouse clicks
  + The F1 through F12 function keys
  + Escape followed by another character

1. **Question ID 121**

**What does this shell script do?**

***FOO=/tmp/foo***

***if [ ! –d $FOO ]; then***

***mkdir $FOO***

***fi***

* + Creates /tmp/foo if it does not exist
  + Makes the /tmp/foo directory if a file by that name exists
  + Outputs a message to the screen
  + Creates /tmp/foo and raises an error if there is a problem
  + Nothing, since there is a problem with the conditions in the if statement

1. **Question ID 123**

**Which of the following are correct about for and while loops?**

**(choose two)**

* + for loops operate over a fixed list of items
  + while loops operate over a fix list of items
  + for loops have a test each cycle to determine if it should run again
  + while loops have a test each cycle to determine if it should run again
  + for loops require a variable over which to iterate

1. **Question ID 124**

**Given the following part of a script:**

***if [ -f $1 ]; then***

***echo “I am here”***

***fi***

* + What is the meaning of $1?
  + It is a special variable that indicates the exit code of the command before it
  + It is the first argument passed to the script
  + It is a file called $1
  + It is a parameter to –f, indicating the size of the file
  + It is a list of files that gets interpolated

1. **Question ID 125**

**Given the following script that is run through ./test.sh hello goodbye**

***if [ -f $2 ]; then***

***echo “I am here”***

***fi***

* + When will “I am here” be printed?
  + If there are two files in the current directory
  + The script will always print “I am here”
  + Never
  + If a file called “hello” exists in the current directory
  + If a file called “goodbye” exists in the current directory

1. **Question ID 126**

**What is the correct way to assign the word “Hello” to a variable?**

* + $A=”Hello”
  + echo “Hello” > A
  + A=”Hello”
  + echo $A “Hello”
  + A = “Hello”

1. **Question ID 127**

**What is the correct way to save the current directory to a variable?**

* + A=`pwd`
  + A=pwd
  + A=cwd
  + pwd $A
  + pwd | $A

1. **Question ID 128**

**Which shell command accepts input from the user’s keyboard?**

* + echo
  + $1
  + read
  + input
  + gets

1. **Question ID 129**

**What information is held inside $? ?**

* + The current process id
  + The number of arguments passed to the script
  + The current user ID
  + The previous command’s exit code
  + The name of the command run

1. **Question ID 130**

**How would you finish your script with an exit code of 42?**

* + return 42
  + $?=42
  + CODE=42
  + exit 42
  + break 42

1. **Question ID 131**

**The if command looks for what exit code to consider a condition to be true?**

* + 10
  + 255
  + 0
  + 1
  + 8

1. **Question ID 132**

**The number of users logged in is in a variable called USERS. How would you test to see if 5 users are logged in?**

* + test –f USERS=5
  + test $USERS = 5
  + test $USERS,5
  + test $USERS –eq 5
  + test $USERS –a 5

1. **Question ID 133**

**Given the following script:**

***while [ ! –f /tmp/foo ]; do***

***echo –n “.”***

***process\_data > /tmp/foo***

***done***

**Which of the following are true?**

**(choose two)**

* + If a file called /tmp/foo exists, process\_data won’t be run
  + The screen will fill with dots.
  + /tmp/foo will be removed if it exists
  + process\_data will never be run
  + process\_data will be called at most once

1. **Question ID 134**

**A conditional that lets you make multiple comparisons with a pattern is called:**

* + case
  + fanout
  + if
  + test
  + branch

1. **Question ID 135**

**What is the meaning of $(( $i + 1)) ?**

* + 1 will be added to the i variable
  + This will return the value of the next argument to the script
  + This runs the command stored in variable i
  + If i is 0, the loop will stop
  + This will return the value of the first argument to the script

1. **Question ID 136**

**How would you write a test that says “if /tmp/foo is a directory or USERS is greater than 5”?**

* + test –d /tmp/foo | $USERS > 5
  + test –f /tmp/foo –o $USERS –ge 5
  + test –d /tmp/foo –o $USERS –gt 5

1. Which of the following are valid CPU types for Intel-based platforms?  
   (choose two)
   * 24 bit
   * 64 bit
   * 48 bit
   * 32 bit
2. Question ID 141  
   64 bit platforms can access more memory than 32 bit platforms.  
   True or False?
   * True
   * False

1. Question ID 142  
   Which of the following commands will display CPU information?  
   (choose three)
   * arch
   * lscpu
   * cpuinfo
   * cat /proc/cpuinfo
   * lspic
2. Question ID 143  
   A CPU flag…
   * …defines the CPU manufacturer.
   * …defines how many devices can be attached to the system.
   * …is not a valid term.
   * …defines the features that the CPU supports.

1. Question ID 144  
   Which command displays information from SMBIOS?
   * smbios
   * dmidecode
   * showbios
   * dmibios
2. Question ID 146  
   Choose all of the following statements that are true in regard to virtual RAM:  
   (choose three)
   * Virtual RAM is used when available physical RAM is low.
   * Virtual RAM is also called swap space
   * Virtual RAM is stored on a hard drive
   * Virtual RAM is stored in the CPU

1. Question ID 148  
   Which of the following are common busing systems?  
   (choose two)
   * USB
   * CPU
   * PCI
   * BIOS
   * RAM
2. Question ID 152  
   A division of a hard drive may be referred to as a \_\_\_\_\_\_\_ .
   * label
   * portion
   * partition
   * block

1. Question ID 153  
   Which of the following are valid partitioning types?  
   (choose two)
   * PC
   * MBR
   * GPT
   * BIOS
2. Question ID 154  
   The fdisk command is a tool used for working with the MBR partitioned disks.  
   True or False?
   * True
   * False

1. Question ID 155  
   Which of the following is the valid device file name for the first IDE hard drive on the system?
   * /dev/ide
   * /dev/hda
   * /dev/sda
   * /dev/hd1
2. Question ID 156  
   Which of the following are valid video cable connector types?  
   (choose two)
   * AMD
   * HDA
   * DVI
   * VGA
3. **What does the acronym RPM mean?**
   * Recursive Package Manager
   * RPM Package Management
   * Return Package Management
   * Relocate Package Manager
4. **Question ID 158**

**One way to install new software on a Linux system is to use a package management system.**

**True or False?**

* + True
  + False

1. **Question ID 159**

**When you execute the dmesg command, the system displays messages that are generated by the kernel.**

**True or False?**

* + True
  + False

1. **Question ID 160**

**Which of the following are package management commands for distributions with software distributed in files ending in .deb?**

**(choose three)**

* + aptitude
  + dpkg
  + rpm
  + apt-get

1. **Question ID 161**

**Which of the following are package management commands for distributions with software distributed in files ending in .rpm?**

**(choose three)**

* + rpm
  + apt-get
  + yumex
  + yum

1. **Question ID 162**

**The Linux kernel mounts the following pseudo-filesystems to provide access to information about hardware devices connected to the system:**

**(choose two)**

* + /info
  + /proc
  + /devices
  + /sys

1. **Question ID 163**

**The /proc directory contains a subdirectory for each process present on the system.**

**True or False?**

* + True
  + False

1. **Question ID 164**

**The Process ID (PID) of the init process is**

* + varies
  + 100
  + 0
  + 1

1. **Question ID 165**

**The process (ps) command shows only processes running in the current shell by default.**

**True or False?**

* + True
  + False

1. **Question ID 166**

**The following system load averages are displayed by the top command:**

**(choose three)**

* + 5 minute
  + 1 minute
  + 10 minute
  + 15 minute

1. **Question ID 167**

**The free command outputs statistics about:**

* + Software usage
  + Memory usage
  + Disk usage
  + CPU usage

1. **Question ID 168**

**What directory typically contains log files?**

* + /proc/log
  + /var/log
  + /usr/log
  + /log

1. **Question ID 169**

**Which log file contains messages regarding authentication and authorization?**

* + secure
  + messages
  + syslog
  + dmesg

1. **Question ID 170**

**All log files contain only text data.**

**True or False?**

* + True
  + False

1. **Question ID 171**

**A load average of 1.0 always means the system is fully loaded.**

**True or False?**

* + True
  + False

1. **Question ID 172**

**A command that will continuously update statistics about running processes:**

* + head
  + top
  + tail
  + bottom

1. **Question ID 173**

**The following are valid Linux option styles:**

**(choose three)**

* + DOS slash (/)
  + BSD Unix without a dash
  + Traditional Unix with a single dash (-)
  + GNU long options with two dashes (–)

1. **Question ID 174**

**Which file contains the information passed to the kernel at boot time?**

* + /proc/cmdline
  + /proc/kernel
  + /proc/kargs
  + /proc/kopts

1. **Question ID 175**

**To make changes permanent for kernel parameter files found under /proc/sys, the following file can have entries added to it:**

* + /etc/procsys.conf
  + /etc/procctl.conf
  + /etc/sysinfo.conf
  + /etc/sysctl.conf

1. **Question ID 176**

**To get a list of all packages installed on a system using RPM Package Management you can execute:**

* + rpm -ql
  + rpm -qa
  + rpm -qf

1. **Which of the following would be considered a host?**
   * A CDROM
   * The computer’s hard drive
   * A network cable
   * A printer attached to the network via an IP address
2. **Question ID 178**

**A service is…**

* + …another name for a computer’s hostname.
  + …a feature provided by one computer to another.
  + …a file that contains configuration information.
  + …like an IP address.

1. **Question ID 180**

**A network packet contains …**

**(choose two)**

* + …the name of the router.
  + …the IP address of the source machine.
  + …a hard drive partition.
  + …the IP address of the destination machine.

1. **Question ID 181**

**Only servers have hostnames.**

**True or False?**

* + True
  + False

1. **Question ID 184**

**Which of the following protocols defines how network communication functions?**

* + TCP/IP
  + SSH
  + DHCP
  + DNS

1. **Question ID 185**

**Which of the following are valid IPv4 addresses?**

**(choose two)**

* + 192.105.10.10
  + 192.105.10.10.2
  + 192.301.25.25
  + 10.33.55.77

1. **Question ID 186**

**The name of the primary wired network devices is ether0.**

**True or False?**

* + True
  + False

1. **Question ID 189**

**Which of the following commands will display your machine’s IP address?**

* + ipconfig
  + dig
  + ifconfig
  + route

1. **Question ID 190**

**Which of the following commands will display the routing table?**

**(choose two)**

* + netstat -r
  + dig
  + ifconfig
  + route

1. **Question ID 191**

**Which of the following commands will allow you to log into a remote machine?**

* + route
  + ssh
  + dig
  + netstat

1. **Question ID 192**

**What option to the netstat command has information shown as numbers rather than names?**

* + –name
  + -r
  + -n
  + -t

**The RSA key fingerprint allows the dig command to connect to remote systems.**

**True or False?**

* True
* False
* **Which files contain user account information?**

**(choose two)**

* + /etc/passwd
  + /etc/shadow
  + /etc/group
* **Question ID 198**

**Which user can view the /etc/shadow file?**

* + The root user
  + Any member of the password group
  + All users
  + No users

* **Question ID 199**

**Which command will display the UID, GID and groups your current user belongs to?**

* + id
  + who
  + whoami
  + about
* **Question ID 200**

**Each user belongs to at least one group.**

**True or False?**

* + True
  + False

* **Question ID 201**

**Which command will display the users that are currently logged in to the system?**

* + whoami
  + about
  + who
  + id
* **Question ID 202**

**The sudo command allows regular users to…**

* + …run any command as root, after providing the sudo password.
  + …run certain commands as the root user.
  + …run any command as root, after providing the root password.
  + …run any commands as a system account without logging in.

* **Question ID 203**

**The /etc/sudoers file should be edited directly by root using the visudo command.**

**True or False?**

* + True
  + False
* **Question ID 204**

**Which of the following commands will allow you to switch to the user, branch?**

**(choose three)**

* + sudo branch
  + su – branch
  + su -l branch
  + su branch

* **Question ID 205**

**The visudo command uses which text editor by default?**

* + vi
  + nano
  + pico
  + gedit
* **Question ID 206**

**Which of the following commands will display the group(s) a user belongs to?**

* + group
  + id
  + all
  + whoami

* **Question ID 207**

**Which of the following commands will display the groups that the user bob belongs to?**

**(choose one)**

* + groups -a
  + id bob
  + group bob
  + all bob
* **Question ID 208**

**The /etc/group file follows what structure?**

* + groups -a
  + user:group
  + group:GID:user\_list
  + group\_name:password\_placeholder:GID:user\_list

* **Question ID 209**

**A GID is associated with a group name.**

**True or False?**

* + True
  + False
* **Question ID 210**

**A user can belong to…**

* + Only five groups
  + Only one group
  + At least 16 groups
  + Only groups with a GID over 500
* **Question ID 212**

**Sudo privileges can be used to specify which user can use the sudo command to execute commands as other users.**

**True or False?**

* + True
  + False
* **Question ID 213**

**In distributions that do not allow the root user to login directly or via the su command, the installation process automatically configures one user account to be able to use the sudo command to execute commands as if they were executed by the root user.**

**True or False?**

* + True
  + False
* **Question ID 214**

**Which of the following commands will display how long the system has been running since the last boot?**

**(choose two)**

* + id
  + w
  + who
  + uptime
* **Question ID 215**

**The /etc/shadow file contains plain-text passwords.**

**True or False?**

* + True
  + False
* **Question ID 216**

**Which command can be used to view the /etc/passwd file entries?**

* + getent
  + uppasswd
  + uptime
* **UIDs 1-500 are usually reserved for what kind of users?**
  + System accounts, such as server processes
  + Are not used for user accounts, but for group accounts
  + Log-in (human) users
  + Remote log-in accounts
* **Question ID 218**

**If a user is deleted, the files and directories that the user owned…**

* + …will show a UID as the owner, but not user name.
  + …will have no UID owner.
  + …are deleted as well.
  + …will have no user owner.

* **Question ID 219**

**Which of the following options for the useradd command allows root to specify the UID to be associated with the account?**

* + -U
  + -u
  + -G
  + -g
* **Question ID 220**

**Which of the following options for the useradd command allows root to specify supplementary groups the user will be a member of?**

* + -G
  + -u
  + U
  + -g

* **Question ID 221**

**On a system that does not use UPG, the useradd command will also create a user group. For example, user bob, group bob.**

**True or False?**

* + True
  + False
* **Question ID 222**

**The useradd command will create a home directory by default for a user.**

**True or False?**

* + True
  + False

* **Question ID 223**

**The usermod command can be used to do all of the following except…**

* + …add a user to a supplementary group.
  + …change the user’s MAX and MIN password settings.
  + …change the user’s home directory.
  + …change the user’s UID and GID.
* **Question ID 224**

**Which of the following commands will add the group extra to the user bob’s secondary groups in addition to bob’s current secondary groups?**

* + usermod -G extra bob
  + usermod -a extra bob
  + usermod -aG extra bob
  + usermod -ag bob extra
* **Question ID 225**

**Which option for the usermod command can be used to specify a user’s group ID (either primary or secondary)?**

**(choose two)**

* + -g
  + -G
  + -s
  + -S
* **Question ID 226**

**For non-root users, the passwd command can only be used to change the password of the user running the command.**

**True or False?**

* + True
  + False
* **Question ID 227**

**The userdel command will…**

* + …delete the user account, but leave the user’s files by default.
  + …will prompt before deleting each file owned by a user.
  + …automatically delete a user and the user’s home directory and its contents.
  + …automatically delete a user and all the files owned by that user.
* **Question ID 228**

**The groupmod command can be used to change a group name.**

**True or False?**

* + True
  + False
* **Question ID 229**

**The groupmod command can be used to change a group GID.**

**True or False?**

* + True
  + False
* **Question ID 230**

**The groupmod command can be used to add users to a group.**

**True or False?**

* + True
  + False
* **Question ID 231**

**Which of the following commands can be used to modify a group?**

* + groupadd
  + modgroup
  + addgroup
  + groupmod
* **Question ID 232**

**Which command can be used to determine a user’s most recent log in?**

* + last
  + history
  + shell
  + login
* **Question ID 233**

**Which of the following files contains encrypted user password information?**

* + /etc/usr
  + /etc/shadow
  + /etc/passwd
  + /etc/group
* **Question ID 234**

**Which of the following files contains user IDs?**

* + /etc/group
  + /etc/shadow
  + /etc/usr
  + /etc/passwd
* **Question ID 235**

**Which of the following files does the groupadd command use to determine the new GID when a GID isn’t specified?**

* + /etc/shadow
  + /etc/group
  + /etc/passwd
  + /etc/usr
* **Question ID 236**

**Which of the following commands, run as root, will prevent the user bob from logging in?**

* + usermod -d bob
  + usermod -l bob
  + usermod -D bob
  + usermod -L bob
* **Question ID 673**

**What directory contains user’s home directories?**

* + /
  + /home
  + /rootfs
  + /user

1. **Which of the following commands set “other” permissions on file to r-x?**
   * chmod o=r+x file
   * chmod o=rx file
   * chmod o-r-w file
   * chmod o+rx file
2. **Question ID 238**

**Which of the following commands sets “other” permissions on file to r-x?**

* + chmod 777 file
  + chmod 776 file
  + chmod 775 file
  + chmod 774 file

1. **Question ID 239**

**Only one set (user, group, other) of permission can be changed at once using the symbolic method.**

**True or False?**

* + True
  + False

1. **Question ID 240**

**Which of the following are methods for setting permissions using the chmod command?**

**(choose two)**

* + binary
  + symbolic
  + letter
  + octal

1. **Question ID 241**

**The chown command can be used to change the owner and group of a file.**

**True or False?**

* + True
  + False

1. **Question ID 242**

**The chgrp command can be used to change the owner and group of a file.**

**True or False?**

* + True
  + False

1. **Question ID 243**

**The user sysadmin will be able to read the file because they own it.**

***—-r–r– 1 sysadmin group 38270 Sep 2 18:49 file***

**True or False?**

* + True
  + False

1. **Question ID 244**

**The user sysadmin will be able to change the permissions of the file because they own it.**

***—-r–r– 1 sysadmin group 38270 Sep 2 18:49 file***

**True or False?**

* + True
  + False

1. **Question ID 245**

**Octal notation uses the following values for the permissions granted:**

* + r = 4, w = 2, x = 1
  + r = 7, w = 5, x = 0
  + r = 3, w = 2, x = 1
  + r = 4, w = 2, x = 0

1. **Question ID 246**

**Which of the following permissions would allow all users to add, view, and delete files in a directory?**

* + 666
  + 775
  + 750
  + 777

1. **Question ID 247**

**A user cannot delete a file if they do not own it.**

**True or False?**

* + True
  + False

1. **Question ID 248**

**The “execute” permission on a directory allows you to:**

**(choose three)**

* + Change to that directory or use it as part of a path
  + Along with write permission to successfully delete the directory
  + Along with read permission to successfully perform ls -l
  + Along with write permission to successfully create new files

1. **Question ID 249**

**The “execute” permission on a file allows you to:**

* + Run the file as a script
  + This permission isn’t meaningful for text files.
  + Delete the file
  + Move the file to a new directory

1. **Question ID 250**

**The chgrp command can be used on a file by:**

* + Only root
  + A user that belongs to the files current group
  + The file owner and root
  + Only the file owner

1. **Question ID 251**

**The chown command can be used to change the user owner on a file by:**

* + Only root
  + A user that belongs to the files current group
  + The file owner and root
  + The file owner

1. **Question ID 252**

**The chmod command can be used on a file by:**

* + The file owner and root
  + Only root
  + A user that belongs to the files current group
  + The file owner

1. **Question ID 253**

**Which option for the chown command can be used to change the owner of a directory and all the files and directories below it?**

* + -r
  + -R
  + -f
  + -a

1. **Question ID 254**

**The chown command will only accept one file at a time as an argument.**

**True or False?**

* + True
  + False

1. **Question ID 255**

**The “execute” permission is never set on files by default.**

**True or False?**

* + True
  + False

1. **Question ID 256**

**The user owner of a file will always have the same or higher permissions as “other”.**

**True or False?**

* + True
  + False

1. **The /tmp directory is a temporary directory and will not exist on a system at all times.**

**True or False?**

* + True
  + False

1. **Question ID 349**

**The /var directory has files that change over time.**

**True or False?**

* + True
  + False

1. **Question ID 350**

**The “sticky bit” permission…**

* + …prevents others from overwriting files they don’t own in common directories.
  + …changes the group ownership of existing files in a directory.
  + …prevents others from removing files they don’t own from a common directory.
  + …sets the group ownership of any new file created in a directory.

1. **Question ID 352**

**Which of the following commands will set the “sticky bit” on /shared ?**

* + chmod 4777 /shared
  + chmod 1777 /shared
  + chmod 2777 /shared
  + chmod 7777 /shared

1. **Question ID 353**

**The “setuid” permission…**

* + …allows files in a directory to be manipulated as by the directory owner.
  + …reports the output of a script to the owner.
  + …allows a command to be run as the file owner.
  + …prevents the owner of a file from being changed.

1. **Question ID 355**

**Which of the following commands will set setuid for /usr/bin/program?**

* + None of the above
  + chmod 2755 /usr/bin/program
  + chmod 1755 /usr/bin/program
  + chmod 4755 /usr/bin/program

1. **Question ID 356**

**The setgid permission…**

**(choose two)**

* + …allows files created in a directory to be owned by the group that owns the directory.
  + …can only be set on files.
  + …allows a command to be run as the group owner of the file.
  + …prevents the group owner of a file from being changed.

1. **Question ID 357**

**Which of the following commands will set setgid on /shared ?**

* + None of the above
  + chmod 4777 /shared
  + chmod 1777 /shared
  + chmod 2777 /shared

1. **Question ID 359**

**Setting setgid on a directory…**

* + …will allow scripts in the directory to be executed as the group owner of the directory.
  + …will set the group owner of all files created in the directory to the group owner of the directory.
  + …does nothing.
  + …is not allowed by the system.

1. **Question ID 360**

**Deleting a source file will break an associated hard link.**

**True or False?**

* + True
  + False

1. **Question ID 361**

**A source and a hard link must be part of the same filesystem.**

**True or False?**

* + True
  + False

1. **Question ID 362**

**Deleting a source file will break an associated symbolic link.**

**True or False?**

* + True
  + False

1. **Question ID 363**

**A source file and a symbolic link must be part of the same file system.**

**True or False?**

* + True
  + False

1. **Question ID 364**

**Which of the following commands would create a hard link, link to file?**

* + ln file link
  + ln -s link file
  + ln -s file link
  + ln link file

1. **Question ID 365**

**Which of the following commands would create a symbolic link, link to file?**

* + ln -s link file
  + ln file link
  + ln -s file link
  + ln link file

### To go to the end of an info page, press:

* + END
  + n
  + N
  + ]

### Question ID 43

### To go to the next match of a search on a man page, press:

* + ]
  + n
  + N
  + }

### Question ID 44

### When interpreting the SYNOPSIS of a command found on a man page, the “|” means:

* + The items it separates can be used together
  + The items it separates cannot be used together

### Question ID 45

### After performing a search, you can use the \_\_\_\_ key to return to a previously found match:

* + n
  + N
  + D
  + U

### Question ID 46

### To move a page forward one at a time while viewing a man page, press the following:

* + Spacebar
  + m
  + a
  + Enter

### Question ID 59

### The ls command without options or arguments…

* + …lists the contents of the current directory.
  + …prompts for a directory to list.
  + …lists the contents of a user’s home directory.
  + …generates an error as this command requires arguments.

### Question ID 68

### Which option can be used with the rm command to prompt before deleting?

* + I
  + -i
  + -P
  + A

### Question ID 69

### The rm command can delete multiple files at once.

### True or False?

* + True
  + False

### Question ID 70

### Which of the following commands can be used to rename a file?

* + name
  + rn
  + mv
  + cp

### Question ID 72

### The touch command can be used to:

### (choose two)

* + Update the time stamp of existing files
  + Create new files
  + Change a file’s name
  + Change ownership of a file

### Question ID 88

### You try to compress a file that is already compressed. Which of the following statements is true?

* + The file will not be compressed any further than it already was
  + The file changed while you were compressing it
  + The file will actually be uncompressed
  + The compression algorithm needs to be set to the “currently compressed” mode for it to be compressed further
  + The file will be deleted

### Question ID 89

### Which of the following commands can be used to compress a file?

### (choose three)

* + bunzip2
  + zip
  + bzip2
  + cat
  + gzip

### Question ID 90

### The three main modes of tar are:

### (choose three)

* + Extract
  + Copy
  + Compress
  + List
  + Create

### Question ID 91

### In the command tar –czf foo.tar.gz bar, what is the purpose of the f flag?

* + Tells tar to copy only files, and not directories
  + Tells tar to read from the file that follows the flag
  + Tells tar to print the name of each file as it is processed
  + Specifies extra compression is to be used
  + Tells tar to write to the file that follows the flag

### Question ID 92

### Which two commands do the same thing?

### (choose two)

* + tar –xzf foo.tar.gz
  + tar –x foo | gzip
  + tar –c foo | gzip > foo.tar.gz
  + tar –tzf foo.tar.gz
  + tar –czf foo.tar.gz foo

### Question ID 112

### Which option for the wc command will print the total number of words in a file?

* + -l
  + -L
  + -w
  + -C

### Question ID 113

### Which command can be used to print line numbers?

* + num
  + ln
  + nl
  + sort

### Question ID 114

### The command echo “text” > file.txt will create file.txt if it does not already exist.

### True or False?

* + True
  + False

### Question ID 115

### The command echo “text” > file.txt will not overwrite file.txt if it already exists.

### True or False?

* + True
  + False

### Question ID 116

### The command echo “text” >> file.txt will not overwrite file.txt if it already exists.

### True or False?

* + True
  + False

### Question ID 262

### Software is backward compatible if:

* + It still supports old file formats or applications
  + If the next version still works the same way
  + People still use old versions
  + It works across Linux/Mac/Windows
  + It can be upgraded without downtime

### Question ID 263

### Apple’s OS X is:

### (choose three)

* + Derived from Linux
  + Only compatible with Apple hardware
  + Able to natively run Windows binaries
  + Derived from FreeBSD
  + Certified as UNIX compatible
  + Primarily used to manage network services

### Question ID 264

### Microsoft Windows:

### (choose three)

* + Has a short maintenance cycle
  + Comes in desktop and server variants
  + Has built in virtualization
  + Has a new desktop version every year.
  + Has a Linux compatibility mode
  + Has powerful scripting capabilities

### Question ID 265

### Other commercial Unixes:

### (choose two)

* + Are almost obsolete
  + Are tied to their vendor’s hardware
  + Use completely different commands than Linux
  + Are UNIX certified
  + Do not run the GNU tools

### Question ID 266

### When choosing a distribution of Linux, you should consider:

### (choose five)

* + Which management tools are provided by the distribution
  + Which distributions are supported by the software you need to run
  + Popularity on social media.
  + The maintenance cycle of the distribution
  + If you need support on the distribution itself
  + Whether or not the distribution is under active development

### Question ID 302

### The difference between the GPL and LGPL licenses are:

* + LGPL allows you to distribute the software in binary-only form
  + LGPL is shorter than GPL
  + LGPL allows linking to non GPLed software
  + LGPL applies to web services
  + LGPL was made by the OSI while GPL was made by the FSF

### Question ID 303

### Permissive free software licenses:

### (choose three)

* + Can allow software to be used inside closed source software
  + Are not approved by the OSI
  + Are not approved by the FSF
  + Include the GPLv2 and BSD
  + Don’t have a copyleft provision

### Question ID 304

### The Creative Commons version of Public Domain licensing is:

* + Attribution-NonCommercial-ShareAlike
  + Attribution-NonCommercial
  + NoAttribution-ShareAlike
  + No Rights Reserved
  + Attribution

### Question ID 305

### Your company makes a hardware firewall that runs a custom Linux kernel. What are your obligations under GPLv2?

* + There are no requirements
  + You must make the source to your custom web interface available
  + You must make your hardware designs available
  + You must make the source to your kernel available
  + You must ensure your custom kernel runs on a regular Intel machine

### Question ID 306

### Participating in open source projects can improve your technical skills, even if it is not your day job.

### True or False?

* + True
  + False

### Question ID 322

### What are tradeoffs of increasing the level of privacy you have in your web browser?

### (choose two)

* + You may get viruses
  + Sites may not work properly
  + Websites may load slower
  + Images won’t load properly
  + You may have to explicitly permit some cookies to be saved

### Question ID 323

### Which of the following is a tool that helps you anonymize your Internet browsing?

* + CookieCleaner
  + Web proxy
  + The onion router
  + AnonFirefox
  + iptables

### Question ID 324

### Social network “like” buttons can track your activity across the Internet.

### True or False?

* + True
  + False

### Question ID 325

### Which of the following are properties of a strong password?

### (choose three)

* + A mix of upper and lower case
  + Long so that it can be reused on multiple sites
  + Includes symbols
  + At least 10 characters long
  + Based on easy to remember items like birthdays

### Question ID 326

### What can be done to prevent remote people from running programs on your computer?

### (choose two)

* + Don’t use wireless networks – only wired
  + Use strong passwords on all user accounts
  + Turn on a firewall
  + Block third party cookies
  + Block all cookies

### Question ID 343

### The acronym CLI stands for:

* + Computer Link Interpreter
  + Command Line Interpreter
  + Computer Line Interface
  + Command Line Interface

### Question ID 344

### Traditional UNIX command options used a single dash, like -a; \_\_\_\_\_\_\_ command options use two dashes like –all.

* + LINUX
  + Kernel
  + GNU
  + shell

### Question ID 345

### The acronym GNU stands for:

* + Gnu’s Not Unix
  + Go Next Unit
  + Gnu’s Nearly Unix
  + Good News Unix

### Question ID 346

### What one character treats the character that follows it as if it was surrounded by single quotes?

* + /
  + %
  + #

### Question ID 347

### The main purpose of using glob characters is to be able to provide a command a list of filenames.

### True or False?

* + True
  + False

Начало формы

Конец формы

1. **The number of users logged in is in a variable called USERS. How would you test to see if 5 users are logged in?**
   * test $USERS = 5
   * test $USERS –a 5
   * test $USERS,5
   * test –f USERS=5
   * test $USERS –eq 5

1. **Question ID 133**

**Given the following script:**

***while [ ! –f /tmp/foo ]; do***

***echo –n “.”***

***process\_data > /tmp/foo***

***done***

**Which of the following are true?**

**(choose two)**

* + The screen will fill with dots.
  + /tmp/foo will be removed if it exists
  + process\_data will never be run
  + If a file called /tmp/foo exists, process\_data won’t be run
  + process\_data will be called at most once

1. **Question ID 134**

**A conditional that lets you make multiple comparisons with a pattern is called:**

* + fanout
  + if
  + branch
  + case
  + test

1. **Question ID 135**

**What is the meaning of $(( $i + 1)) ?**

* + If i is 0, the loop will stop
  + This will return the value of the first argument to the script
  + 1 will be added to the i variable
  + This runs the command stored in variable i
  + This will return the value of the next argument to the script

1. **Question ID 136**

**How would you write a test that says “if /tmp/foo is a directory or USERS is greater than 5”?**

* + test –d /tmp/foo | $USERS > 5
  + test /tmp/foo –d –o $USERS -gt 5
  + test /tmp/foo || $USERS > 5
  + test –d /tmp/foo –o $USERS –gt 5
  + test –f /tmp/foo –o $USERS –ge 5

1. **Question ID 152**

**A division of a hard drive may be referred to as a \_\_\_\_\_\_\_ .**

**(choose two)**

* + partition
  + label
  + slice
  + block

1. **Question ID 153**

**Which of the following are valid partitioning types?**

**(choose two)**

* + MBR
  + PC
  + GPT
  + BIOS

1. **Question ID 154**

**The fdisk command is a tool used for working with the MBR partitioned disks.**

**True or False?**

* + True
  + False

1. **Question ID 155**

**Which of the following is the valid device file name for the first IDE hard drive on the system?**

* + /dev/sda
  + /dev/hd1
  + /dev/hda
  + /dev/ide

1. **Question ID 156**

**Which of the following are valid video cable connector types?**

**(choose two)**

* + AMD
  + DVI
  + VGA
  + HDA

1. **Question ID 172**

**A command that will continuously update statistics about running processes:**

* + top
  + tail
  + bottom
  + head

1. **Question ID 173**

**The following are valid Linux option styles:**

**(choose three)**

* + Traditional Unix with a single dash (-)
  + BSD Unix without a dash
  + DOS slash (/)
  + GNU long options with two dashes (–)

1. **Question ID 174**

**Which file contains the information passed to the kernel at boot time?**

* + /proc/kargs
  + /proc/kernel
  + /proc/kopts
  + /proc/cmdline

1. **Question ID 175**

**To make changes permanent for kernel parameter files found under /proc/sys, the following file can have entries added to it:**

* + /etc/sysctl.conf
  + /etc/procctl.conf
  + /etc/procsys.conf
  + /etc/sysinfo.conf

1. **Question ID 176**

**To get a list of all packages installed on a system using RPM Package Management you can execute:**

* + rpm -qa
  + rpm -ql
  + rpm -qf
  + rpm -qi

1. **Question ID 177**

**Which of the following would be considered a host?**

* + The computer’s hard drive
  + A network cable
  + A CDROM
  + A printer attached to the network via an IP address

1. **Question ID 192**

**What option to the netstat command has information shown as numbers rather than names?**

* + -t
  + -n
  + –name
  + -r

1. **Question ID 193**

**Which of the following commands will allow you to log into the machine server1 with the account name nick?**

* + ssh nick@server1
  + ssh nick->server1
  + ssh nick-server1
  + ssh nick&server1

1. **Question ID 194**

**The RSA key fingerprint allows the dig command to connect to remote systems.**

**True or False?**

* + True
  + False

1. **Question ID 197**

**Which files contain user account information?**

**(choose two)**

* + /etc/shadow
  + /etc/group
  + /etc/passwd

1. **Question ID 212**

**Sudo privileges can be used to specify which user can use the sudo command to execute commands as other users.**

**True or False?**

* + True
  + False

1. **Question ID 213**

**In distributions that do not allow the root user to login directly or via the su command, the installation process automatically configures one user account to be able to use the sudo command to execute commands as if they were executed by the root user.**

**True or False?**

* + True
  + False

1. **Question ID 214**

**Which of the following commands will display how long the system has been running since the last boot?**

**(choose two)**

* + who
  + w
  + id
  + uptime

1. **Question ID 215**

**The /etc/shadow file contains plain-text passwords.**

**True or False?**

* + True
  + False

1. **Question ID 216**

**Which command can be used to view the /etc/passwd file entries?**

* + getent
  + uptime
  + getpasswd
  + uppasswd

1. **Question ID 232**

**Which command can be used to determine a user’s most recent log in?**

* + login
  + last
  + history
  + shell

1. **Question ID 233**

**Which of the following files contains encrypted user password information?**

* + /etc/usr
  + /etc/shadow
  + /etc/passwd
  + /etc/group

1. **Question ID 234**

**Which of the following files contains user IDs?**

* + /etc/passwd
  + /etc/group
  + /etc/shadow
  + /etc/usr

1. **Question ID 235**

**Which of the following files does the groupadd command use to determine the new GID when a GID isn’t specified?**

* + /etc/shadow
  + /etc/usr
  + /etc/passwd
  + /etc/group

1. **Question ID 236**

**Which of the following commands, run as root, will prevent the user bob from logging in?**

* + usermod -L bob
  + usermod -D bob
  + usermod -d bob
  + usermod -l bob

1. **Question ID 252**

**The chmod command can be used on a file by:**

* + The file owner and root
  + The file owner
  + A user that belongs to the files current group
  + Only root

1. **Question ID 253**

**Which option for the chown command can be used to change the owner of a directory and all the files and directories below it?**

* + -f
  + -R
  + -a
  + -r

1. **Question ID 254**

**The chown command will only accept one file at a time as an argument.**

**True or False?**

* + True
  + False

1. **Question ID 255**

**The “execute” permission is never set on files by default.**

**True or False?**

* + True
  + False

1. **Question ID 256**

**The user owner of a file will always have the same or higher permissions as “other”.**

**True or False?**

* + True
  + False

1. **Question ID 361**

**A source and a hard link must be part of the same filesystem.**

**True or False?**

* + True
  + False

1. **Question ID 362**

**Deleting a source file will break an associated symbolic link.**

**True or False?**

* + True
  + False

1. **Question ID 363**

**A source file and a symbolic link must be part of the same file system.**

**True or False?**

* + True
  + False

1. **Question ID 364**

**Which of the following commands would create a hard link, link to file?**

* + ln link file
  + ln -s link file
  + ln file link
  + ln -s file link

1. **Question ID 365**

**Which of the following commands would create a symbolic link, link to file?**

* + ln link file
  + ln -s file link

1. **One of the jobs of the kernel is to:**
   * Manage the system’s resources
   * Turn source code into machine code
   * Load the operating system after the computer is turned on
   * Transfer mail from one machine to another
2. **Question ID 3**

**Unix is:**

**(choose two)**

* + An operating system
  + A type of hardware
  + A trademark
  + A distribution of Linux
  + A text editor

1. **Question ID 5**

**Linux is written in:**

* + C
  + .NET
  + C++
  + Java
  + Perl

1. **Question ID 6**

**Source code refers to:**

* + The version of a program that the computer runs on the CPU
  + The license that dictates how you may use and share the software
  + The interface that software uses to talk to the kernel
  + A human readable version of computer software

1. **Question ID 22**

**What is the standard option to provide a command line program to view its documentation?**

* + –info
  + –doc
  + –help
  + -h

1. **Question ID 23**

**The command man -k is the same as the command apropos.**

**True or False?**

* + True
  + False

1. **Question ID 24**

**The whatis command is the same as man -w.**

* + True
  + False

1. **Question ID 26**

**The directory where additional documentation for software packages most likely can be found is:**

* + /var/lib/doc
  + /usr/software/doc
  + /usr/share/doc
  + /var/share/doc

1. **Question ID 47**

**Hidden files are files that begin with what character?**

* + A plus (+)
  + A dash (-)
  + A period (.)
  + An asterisk (\*)

1. **Question ID 48**

**What option for the ls command will display all files, including hidden files?**

* + -w
  + -H
  + -L
  + -a

1. **Question ID 49**

**The top-level directory on a Linux system is represented as:**

* + /
  + /root
  + /home
  + C:

1. **Question ID 50**

**Is the following path absolute or relative?**

***/etc/ppp***

* + Relative
  + Absolute

1. **Question ID 51**

**Is the following path absolute or relative?**

***sysadmin/Documents***

* + Relative
  + Absolute

1. **Question ID 73**

**Compression on a file works by:**

* + Removing the high order bit from each byte
  + Consolidating multiple files into one
  + Removing redundant information
  + Storing most of the data on removable media and just leaving a pointer
  + Eliminating gaps within the file

1. **Question ID 75**

**In general, for which of the following would you want to use lossless compression?**

* + An mp3 audio file
  + A movie
  + A log file
  + A JPEG image
  + An encrypted email

1. **Question ID 76**

**Lossy compression:**

**(choose three)**

* + Is often used with documents
  + Decompresses to an identical version as the original
  + Sacrifices some quality
  + Usually results better compression than lossless
  + Is often used with images

1. **Question ID 77**

**You type gzip myfile.tar. What happens?**

**(choose two)**

* + myfile.tar.gz holds a compressed version of myfile.tar
  + An error; you forgot to pass the name of the output file
  + An error; you forgot to specify the file with –f
  + myfile.tar is unarchived into the current directory
  + myfile.tar is removed

1. **Question ID 93**

**Error messages generated by commands are sent where by default?**

* + STDIN
  + Log files
  + STDERR
  + STDOUT

1. **Question ID 94**

**A successful command will print output to STDOUT.**

**True or False?**

* + True
  + False

1. **Question ID 95**

**Which of the following commands will direct error messages to the file, error.log?**

**(choose one)**

* + ls /root > error.log
  + ls /root >> error.log
  + ls /root 2> error.log
  + ls /root $> error.log

1. **Question ID 96**

**A pipe allows you to…**

* + …send the same input to multiple commands.
  + …send the output of one command to another.
  + …send the output of a command to a file.
  + …type multiple commands at one prompt.

1. **Question ID 97**

**Channel 2 is:**

* + STDERR
  + STDIN
  + STDALL
  + STDOUT

1. **Question ID 117**

**The echo command:**

* + Tests a variable for duplication
  + Duplicates the input stream to the output stream
  + Is used for variable assignment
  + Is used to output text to the console
  + Copies variables from one to another

1. **Question ID 118**

**A file begins with #!/bin/csh. This means:**

* + C Shell compatibility mode is enabled
  + Running the script will invoke /bin/csh to interpret the rest of the file
  + The operator should not be using /bin/csh
  + This is a Perl script
  + Nothing, this is a comment

1. **Question ID 119**

**Which are appropriate editors for writing shell scripts?**

**(choose two)**

* + nano
  + LibreOffice Writer
  + /bin/bash
  + vi
  + Firefox

1. **Question ID 120**

**Most of nano’s commands take the form of:**

* + Escape followed by another character
  + Mouse clicks
  + The F1 through F12 function keys
  + Alt and another character
  + Control and another character

1. **Question ID 121**

**What does this shell script do?**

***FOO=/tmp/foo***

***if [ ! –d $FOO ]; then***

***mkdir $FOO***

***fi***

* + Nothing, since there is a problem with the conditions in the if statement
  + Makes the /tmp/foo directory if a file by that name exists
  + Creates /tmp/foo if it does not exist
  + Creates /tmp/foo and raises an error if there is a problem
  + Outputs a message to the screen

1. **Question ID 140**

**Which of the following are valid CPU types for Intel-based platforms?**

**(choose two)**

* + 48 bit
  + 24 bit
  + 64 bit
  + 32 bit

1. **Question ID 141**

**64 bit platforms can access more memory than 32 bit platforms.**

**True or False?**

* + True
  + False

1. **Question ID 157**

**What does the acronym RPM mean?**

* + Relocate Package Manager
  + Return Package Management
  + RPM Package Management
  + Recursive Package Manager

1. **Question ID 158**

**One way to install new software on a Linux system is to use a package management system.**

**True or False?**

* + True
  + False

1. **Question ID 159**

**When you execute the dmesg command, the system displays messages that are generated by the kernel.**

**True or False?**

* + True
  + False

1. **Question ID 160**

**Which of the following are package management commands for distributions with software distributed in files ending in .deb?**

**(choose three)**

* + rpm
  + apt-get
  + dpkg
  + aptitude

1. **Question ID 161**

**Which of the following are package management commands for distributions with software distributed in files ending in .rpm?**

**(choose three)**

* + yum
  + apt-get
  + rpm
  + yumex

1. **Question ID 177**

**Which of the following would be considered a host?**

* + A printer attached to the network via an IP address
  + A CDROM
  + The computer’s hard drive
  + A network cable

1. **Question ID 178**

**A service is…**

* + …a file that contains configuration information.
  + …another name for a computer’s hostname.
  + …a feature provided by one computer to another.
  + …like an IP address.

1. **Question ID 180**

**A network packet contains …**

**(choose two)**

* + …the IP address of the destination machine.
  + …a hard drive partition.
  + …the name of the router.
  + …the IP address of the source machine.

1. **Question ID 181**

**Only servers have hostnames.**

**True or False?**

* + True
  + False

1. **Question ID 197**

**Which files contain user account information?**

**(choose two)**

* + /etc/passwd
  + /etc/shadow
  + /etc/group

1. **Question ID 198**

**Which user can view the /etc/shadow file?**

* + The root user
  + No users
  + Any member of the password group
  + All users

1. **Question ID 199**

**Which command will display the UID, GID and groups your current user belongs to?**

* + id
  + whoami
  + who
  + about

1. **Question ID 200**

**Each user belongs to at least one group.**

**True or False?**

* + True
  + False

1. **Question ID 201**

**Which command will display the users that are currently logged in to the system?**

* + who
  + about
  + whoami
  + id

1. **Question ID 217**

**UIDs 1-500 are usually reserved for what kind of users?**

* + Are not used for user accounts, but for group accounts
  + System accounts, such as server processes
  + Remote log-in accounts
  + Log-in (human) users

1. **Question ID 218**

**If a user is deleted, the files and directories that the user owned…**

* + …are deleted as well.
  + …will have no UID owner.
  + …will show a UID as the owner, but not user name.
  + …will have no user owner.

1. **Question ID 219**

**Which of the following options for the useradd command allows root to specify the UID to be associated with the account?**

* + -g
  + -u
  + -U
  + -G

1. **Question ID 220**

**Which of the following options for the useradd command allows root to specify supplementary groups the user will be a member of?**

* + -u
  + U
  + -g
  + -G

1. **Question ID 221**

**On a system that does not use UPG, the useradd command will also create a user group. For example, user bob, group bob.**

**True or False?**

* + True
  + False

1. **Question ID 237**

**Which of the following commands set “other” permissions on file to r-x?**

* + chmod o+rx file
  + chmod o-r-w file
  + chmod o=r+x file
  + chmod o=rx file

1. **Question ID 238**

**Which of the following commands sets “other” permissions on file to r-x?**

* + chmod 774 file
  + chmod 776 file
  + chmod 775 file
  + chmod 777 file

1. **Question ID 239**

**Only one set (user, group, other) of permission can be changed at once using the symbolic method.**

**True or False?**

* + True
  + False

1. **Question ID 240**

**Which of the following are methods for setting permissions using the chmod command?**

**(choose two)**

* + letter
  + octal
  + symbolic
  + binary

1. **Question ID 241**

**The chown command can be used to change the owner and group of a file.**

**True or False?**

* + True
  + False

1. **Question ID 267**

**The Samba application is a:**

* + Mail Server
  + Security Server
  + File Server
  + Web Server

1. **Question ID 268**

**Which of the following are examples of desktop software?**

**(choose two)**

* + Web server
  + Web browser
  + File share
  + Compiler
  + Music player

1. **Question ID 269**

**If you wanted to set up a blog, which software would be most helpful?**

* + MySQL
  + Postfix
  + WordPress
  + Dovecot
  + Samba

1. **Question ID 270**

**Which of the following pieces of software deal with file sharing?**

**(choose three)**

* + NFS
  + X-Windows
  + Netatalk
  + Samba
  + PostgreSQL

1. **Question ID 271**

**If you wanted to create and print an invoice, which software could you use?**

* + GNOME
  + Compiz
  + Firefox
  + LibreOffice
  + Evolution

1. **Question ID 307**

**Which of the following is true about graphical mode?**

**(choose three)**

* + You have menus and tools to help you find what you are looking for
  + You access this mode by logging into a graphical display
  + After login, you are provided with a command prompt
  + After login, you are provided with a desktop
  + You cannot use your mouse

1. **Question ID 308**

**Which of the following is provided by a graphical interface that isn’t normally provided to a non graphical interface?**

**(choose four)**

* + Desktop
  + Shell
  + Windows
  + Popups
  + Menus

1. **Question ID 309**

**A server is likely to be running in graphical mode.**

**True or False?**

* + True
  + False

1. **Question ID 310**

**In graphical mode, you can get to a shell by running which applications?**

**(choose two)**

* + guiterm
  + gbash
  + terminal
  + xconsole
  + xterm

1. **Question ID 311**

**Which of the following are traits of a multiuser operating system?**

**(choose three)**

* + An administrative user gets a dedicated CPU
  + Users can protect their information from other users
  + Resources are shared between users
  + Many users can log in simultaneously with a unique account
  + Each user can only log in once per day

1. **Question ID 327**

**Select all the applications that provide access to the Command Line Interface (CLI)?**

**(choose two)**

* + Virtual Terminal
  + firefox
  + opera
  + Terminal window

1. **Question ID 328**

**Which environment variable contains a list of directories that is searched for commands to execute?**

* + PATH
  + EXEC
  + PS1
  + PS2

1. **Question ID 329**

**Select the command that can report the location of a command:**

* + where
  + what
  + which

1. **Question ID 331**

**A pair of single quotes ( ‘ ) will prevent the shell from interpreting any metacharacter.**

**True or False?**

* + True
  + False

1. **Question ID 348**

**The /tmp directory is a temporary directory and will not exist on a system at all times.**

**True or False?**

* + True
  + False

1. **Question ID 349**

**The /var directory has files that change over time.**

**True or False?**

* + True
  + False

1. **Question ID 350**

**The “sticky bit” permission…**

* + …prevents others from removing files they don’t own from a common directory.
  + …changes the group ownership of existing files in a directory.
  + …prevents others from overwriting files they don’t own in common directories.
  + …sets the group ownership of any new file created in a directory.

1. **Question ID 352**

**Which of the following commands will set the “sticky bit” on /shared ?**

* + chmod 4777 /shared
  + chmod 2777 /shared
  + chmod 7777 /shared
  + chmod 1777 /shared

1. **Question ID 353**

**The “setuid” permission…**

* + …allows a command to be run as the file owner.

1. **When choosing a distribution of Linux, you should consider:**

**(choose four)**

* + Does your organization require long-term support for the system
  + Does the distribution offer a “stable” version
  + If the application software is supported by the distribution
  + Will commercial support be required for the OS
  + Popularity on social media

1. **Embedded Systems means:**
   * Users must support the systems themselves
   * You can view the software’s source code
   * Companies must share their changes
   * Businesses cannot charge anything for the software, only the hardware
   * Systems designed to do a specific task on hardware optimized for only that purpose
2. **The most popular Linux platform for mobile phones is:**
   * IOS
   * Android
   * BlackBerry
   * Slackware
   * MobileLinux
3. **Linux distributions use this to add and remove software from the system:**
   * Application Programming Interface (API)
   * Partitioning tool
   * Package manager
   * Bash
   * Compiler
4. **In Linux, RPM can be defined as:**
   * Random program memory
   * Relational peak monitoring
   * Radical performance machine
   * The speed a record plays back at
   * The Package Manager program for Red Hat Linux
5. **Linux originally only ran on:**
   * Macintosh
   * Intel 386 PCs
   * Raspberry Pi computers
   * Specialized processor chips
   * Xerox copy machines
6. **A long software release cycle is:**
   * Better because old hardware can be utilized beyond its service life
   * Only offered by Red Hat and SUSE
   * Makes programming more difficult since new features cannot be used
   * Valued by businesses that want stability
   * Characterized by infrequent security fixes
7. **Which distribution is related to Red Hat?**
   * Raspbian
   * Debian
   * Ubuntu
   * Slackware
   * Fedora
8. **SUSE is derived from which distribution?**
   * Fedora
   * Debian
   * Red Hat Enterprise Linux
   * Slackware
   * Scientific Linux
9. **IoT is one application of embedded systems:**

**True or False?**

* + True
  + False

1. **Artificial intelligence has little potential for gains in efficiency, safety and productivity.**
   * True
   * False
2. **The Raspberry Pi is popular with experimenters because:**
   * It runs Microsoft Office
   * End users have to pay for programming expenses
   * It’s cheap and adaptable
   * The hardware never changes
   * It takes months or years to develop an application
3. **The release cycle:**
   * Only has meaning for paid software
   * Should be short so you always have the freshest releases
   * Should be long so that you have time before you need to upgrade
   * Describes how long software will be supported
   * Dictates how often software is updated
4. **Debian is a community effort that supports many hardware platforms**

**True or False?**

* + True
  + False

1. **Linux Mint is:**
   * Compatible with Android systems
   * A fork of Ubuntu Linux
   * A proprietary version of Ubuntu with advanced features
   * A refreshing after dinner treat
   * Distributed in every country without license restrictions
2. **A computer running Linux can:**
   * Outperform proprietary systems at certain tasks
   * All of the above
   * Function as a web server
   * Serve a government agency
   * Be used to create new programs
3. **Bundling utilities, management tools, and application software with a Linux kernel is called a:**
   * A distribution of Linux
   * A text editor
   * A type of hardware
   * A trademark
4. **A network of inexpensive computers connected to sensors and controllers is called:**
   * Internet of Things (IoT)
   * Creative commons
   * Open source networking
   * Closed source computing
   * Relationational database
5. **The Linux platform that runs on mobile phones is called:**
   * MicroLinux
   * IOS
   * Android
   * Teledroid
   * LinuxMobile
6. **What does a distribution provide to add and remove software from the system?**
   * Compiler
   * Application Programming Interface (API)
   * Bash
   * Package Manager
   * Partitioning tool
7. **A software release cycle describes:**
   * How often upgrades come out for software
   * How often the software’s memory is released back to the operating system
   * How often the computer must be upgraded to support new software
   * How often security fixes are implemented
   * How often the computer must be rebooted
8. **Which distributions are made by, or are clones of, RedHat?**

**(choose two)**

* + Debian
  + CentOS
  + Fedora
  + Ubuntu
  + Slackware

1. **Ubuntu is derived from which distribution?**
   * Slackware
   * Debian
   * Scientific Linux
   * Red Hat Enterprise Linux
2. **The most important consideration when choosing an operating system is:**
   * What the intended use of the system is
   * How much performance is needed
   * The licensing model of the operating system
   * The total cost of ownership
   * Whether or not it is cloud-friendly
3. **A maintenance cycle:**
   * Describes how often updates for software come out
   * Should be short so you always have the freshest releases
   * Only has meaning for paid software
   * Should be long so that you have time before you need to upgrade
   * Describes how long a version of software will be supported
4. **If a software release is in a state in that it has many new features that have not been rigorously tested, it is typically referred to as beta software.**

**True or False?**

* + True
  + False

1. **Software is backward compatible if:**
   * It can be upgraded without downtime
   * People still use old versions
   * It still supports old file formats or applications
   * If the next version still works the same way
   * It works across Linux/Mac/Windows
2. **Apple’s OS X is:**

**(choose three)**

* + Derived from Linux
  + Able to natively run Windows binaries
  + Primarily used to manage network services
  + A fully certified UNIX distribution
  + Tightly integrated with Apple hardware
  + Partially based on code from the FreeBSD project

1. **Microsoft Windows:**

**(choose three)**

* + Has a scripting environment called PowerShell
  + Is generally backwards compatible with previous versions
  + Offers both desktop and server products
  + Has a short maintenance cycle
  + Has a Linux compatibility mode
  + Has a new desktop version every year.

1. **When choosing a distribution of Linux, you should consider:**

**(choose five)**

* + Does the distribution offer a “stable” version
  + Will users require a GUI
  + Will commercial support be required for the OS
  + Does your organization require lon

1. **The Samba application is a:**
   * Security Server
   * File Server
   * Mail Server
   * Web Server
2. **Which of the following are examples of desktop software?**

**(choose two)**

* + Music player
  + File share
  + Web browser
  + Compiler
  + Web server

1. **If you wanted to set up a blog, which software would be most helpful?**
   * Samba
   * MySQL
   * Postfix
   * Dovecot
   * WordPress
2. **Which of the following pieces of software deal with file sharing?**

**(choose three)**

* + X-Windows
  + PostgreSQL
  + Netatalk
  + Samba
  + NFS

1. **If you wanted to create and print an invoice, which software could you use?**
   * Evolution
   * LibreOffice
   * GNOME
   * Compiz
   * Firefox
2. **POP and IMAP are related to:**
   * Serving web pages
   * Reading and writing music
   * Email
   * Letting users log in to multiple servers with 1 set of credentials
   * Sharing files
3. **When a computer boots, it can get its network information through:**
   * LDAP
   * DNS
   * DHCP
   * SMTP
   * X11
4. **Which of the following are examples of text editors?**

**(choose four)**

* + nano
  + Yum
  + pico
  + vim
  + emacs

1. **A package manager:**

**(choose two)**

* + Downloads software from the Internet
  + Keeps track of which files belong to which packages
  + Can optionally repartition your disk to make room for Linux
  + Performs a fresh install of Linux
  + Emails you when software is out of date

1. **An interpreted programming language:**

**(choose two)**

* + Takes fewer resources to run than a compiled language
  + Is converted into machine specific instructions as the program runs
  + Requires a linking step but no compilation step
  + Tends to offer more features than compiled languages
  + Requires a compilation step but no linking step

1. **Which of the following are true about compiled programming languages?**
   * Ruby is a compiled language
   * Compiled languages are great for system administration tasks like scripting
   * C is a compiled language
   * Perl is a compiled language
   * A programmer is usually more productive when using a compiled language
2. **Which package manager is used in Fedora, a Red Hat derived system?**
   * tar
   * bash
   * yum
   * vim
   * apt-get
3. **The Linux shell:**

**(choose three)**

* + Is customizable
  + Has a built-in text editor
  + Allows you to launch programs
  + Has a scripting language
  + Is responsible for tracking the location of configuration files

1. **Which application would you use to edit and piece together sound files to make a podcast?**
   * Audiolicious
   * GIMP
   * Thunderbird
   * Bash
   * Audacity
2. **The two main families of Linux shells are:**

**(choose two)**

* + Emacs
  + C Shell
  + Bourne Shell
  + Python Shell
  + Korn shell

1. **Which server software would you use to create a company directory that you could search and authenticate against?**
   * bind
   * OpenLDAP
   * Samba
   * ISC DHCP
   * Netatalk
2. **A Mail Transfer Agent’s primary purpose is to:**
   * Serve email to end clients
   * Deliver mail between servers
   * Manage the end user’s inbox
   * Filter out spam
   * Act as a gateway between faxes and email
3. **Which of the following are examples of a web server?**

**(choose two)**

* + NFS
  + postfix
  + WordPress
  + Nginx
  + Apache

1. **If you wanted to let a Linux machine share files with Windows clients and servers, you would use:**
   * Netatalk
   * DNS
   * Samba
   * NFS
   * bind
2. **Virtualization means:**
   * A user can connect to a server over the network and use a virtual console
   * Many users can share one hard drive
   * A machine can swap memory to disk
   * A single host can be split up into multiple guests
   * Two users get different memory spaces on the same machine
3. **In virtualization, what are the host and guest?**

**(choose two)**

* + The terms can be used interchangeably
  + A guest is a virtual machine
  + A host is a virtual machine
  + The host is the machine that runs the virtual machines
  + The guest is the machine that runs the virtual machines

1. **Which of the following are traits of cloud computing?**

**(choose two)**

* + You don’t have to worry about performance any more
  + Resources can be accessed from anywhere over a network
  + Scales IT resources so you pay for what you use
  + You own the hardware but pay for it over time
  + Only Linux works in cloud computing

1. **If you wanted to write a report that was to be printed, you would probably use:**
   * A wiki
   * Adobe Flash
   * Firefox
   * Chrome
   * LibreOffice
2. **To protect your privacy online, you can configure your computer to check for updates periodically.**

**True or False?**

* + True
  + False

1. **Which of the following is a tool that helps you anonymize your Internet browsing?**
   * Web proxy
   * Tor Browser
   * Iptables
   * AnonFirefox
   * CookieCleaner
2. **Cloud computing is:**
   * Is made possible by faster internet speeds
   * Is useful for both business and home users
   * Allows users in different geographical regions to work together in real time
   * Requires fewer resources because systems are shared among many users
   * All are correct
3. **The term for individual computers running multiple systems at the same time is:**
   * MultiRun
   * Cloud priority
   * Distribution
   * Virtualization
   * Googleization
4. **Which of the following are traits of a multiuser operating system?**

**(choose three)**

* + Many users can log in simultaneously with a unique account
  + Users can protect their information from other users
  + Resources are shared between users
  + Each user can only log in once per day
  + An administrative user gets a dedicated CPU

1. **If you want to store logins and passwords for different websites in a secure manner, you could use:**
   * A text file in your home directory
   * A LibreOffice document
   * A sticky note on your monitor
   * KeePassX
   * In a spiral bound notebook in your file cabinet
2. **Two components that provide the ability to implement a firewall include:**

**(choose two)**

* + iptables
  + gufw
  + ifconfig
  + Cerberus
  + ipfw

1. **What are tradeoffs of increasing the level of privacy you have in your web browser?**

**(choose two)**

* + You may have to explicitly permit some cookies to be saved
  + Sites may not work properly
  + You may get viruses
  + Websites may load slower
  + Images won’t load properly

1. **Social network “like” buttons can track your activity across the Internet.**

**True or False?**

* + True
  + False

1. **Which of the following are properties of a strong password?**

**(choose three)**

* + At least 10 characters long
  + Based on easy to remember items like birthdays
  + Includes symbols
  + Long so that it can be reused on multiple sites
  + A mix of upper and lower case

1. **What can be done to prevent unauthorized users from accessing your computer remotely?**

**(choose two)**

* + Block third party cookies
  + Turn on a firewall
  + Block all cookies
  + Use strong passwords on all user accounts
  + Don’t use wireless networks – only wired

1. **In graphical mode, you can get to a shell by running which applications?**

**(choose two)**

* + Terminal
  + Gbash
  + console
  + Xterm

1. **Linux source code is available to:**
   * Employees of the FBI, CIA and NSA with top secret clearance
   * Anyone who has the knowledge needed to access it
   * Only university researchers with a government grant
   * Only employees of the Linux Foundation
2. **Source code refers to:**
   * The version of a program that the computer runs on the CPU
   * The interface that software uses to talk to the kernel
   * The license that dictates how you may use and share the software
   * A human-readable version of computer software
3. **Open source means:**

**(choose two)**

* + You can view the software’s source code
  + You must share your changes
  + You can modify the software’s source code
  + You cannot charge anything for the software
  + You must support the software you share

1. **A license where you don’t have access to the source code is called:**
   * Impaired source
   * Closed source
   * Open source
   * Sourceless
2. **Open source licenses differ, but generally agree that:**

**(choose two)**

* + You are not allowed to sell the software
  + You must redistribute your changes
  + You should be able modify the software as you wish
  + You should have access to the source code of software

1. **Richard Stallman is associated with:**
   * BSD Unix
   * Microsoft
   * The Free Software Foundation
   * The Apache foundation
   * The Open Source Initiative
2. **A copyleft provision in a software license means:**
   * You may not link against third party closed source software
   * If you redistribute the software, you must distribute the source to any changes you make
   * You must provide free copies of the software if you use it
   * You must provide support for your modifications
   * You give up your copyright to the software
3. **The largest difference between the GPLv2 and BSD licenses is:**
   * Nothing, they are virtually identical
   * BSD has no copyleft provision
   * GPLv2 requires assigning copyright to the FSF
   * GPLv2 is not approved by the OSI
   * Only BSD allows commercial use
4. **The Free Software Foundation believes that:**

**(choose two)**

* + Software should be free to modify
  + Software should be free to share
  + Software should not have copyright
  + People should write software with no expectation of making money
  + No money should ever change hands

1. **Which of the following licenses was made by the FSF?**
   * Creative Commons
   * GPLv3
   * Apache
   * BSD
   * MIT
2. **A permissive free software license:**

**(choose two)**

* + Means you can use the software for anything you want
  + Does not allow the software to be locked to certain hardware
  + Places the software in the public domain
  + Places no restrictions on sharing modifications
  + Requires you share software changes but not binaries

1. **Linux is distributed under which license?**
   * GPLv3
   * BSD
   * Linux Foundation
   * MIT
   * GPLv2
2. **Who founded the Open Source Initiative?**

**(choose two)**

* + University of California at Berkeley
  + Richard Stallman
  + Bruce Perens
  + Linus Torvalds
  + Eric Raymond

1. **A generic term for Open Source and Free Software is:**
   * SLOFF
   * OS/FS
   * FLOSS
   * GPL
   * Libre Software
2. **Which are examples of permissive software licenses?**

**(choose two)**

* + BSD
  + LGPLv3
  + GPLv3
  + GPLv2
  + MIT

1. **What does it mean when a work is placed in the public domain?**
   * The work was done by a government agency
   * You may not use the work for commercial purposes
   * The author has died
   * The author has relinquished the copyright on the work
   * You must redistribute changes to the software
2. **Creative Commons licenses allow you to:**

**(choose three)**

* + Specify whether or not people may distribute changes
  + Receive royalties on the use of the work
  + Allow or disallow commercial use
  + Specify whether or not changes must be shared
  + Get a veto on where the work is used

1. **If a podcast is licensed under the CC BY-ND license, you may:**

**(choose two)**

* + Use an interview or song from it for your own podcast
  + Post it to your website
  + Share it as long as you give credit to the author
  + Sell it as part of a compilation
  + Add ads to it and post it to your website.

1. **How can you make money from open source software?**

**(choose three)**

* + Unlock premium features for people that pay
  + Sell hardware that’s built to work with the software
  + Take payments for fixing bugs
  + Charge a yearly fee for the right to use the software
  + Provide paid consulting services for users

1. **The difference between the GPL and LGPL licenses are:**
   * LGPL applies to web services
   * LGPL ensures that all variants of the original GPL program has the same freedom of use as the original
   * LGPL allows you to distribute the software in binary-only form
   * LGPL is shorter than GPL
   * LGPL was made by the OSI while GPL was made by the FSF
2. **Permissive free software licenses:**

**(choose three)**

* + Can allow software to be used inside closed source software
  + Include the GPLv2 and BSD
  + Are not approved by the FSF
  + Don’t have a copyleft provision
  + Are not approved by the OSI

1. **The Creative Commons version of Public Domain licensing is:**
   * NoAttribution-ShareAlike (CC BY-SA)
   * Attribution-NonCommercial (CC BY-NC)
   * Attribution (CC BY)
   * No Rights Reserved (CC0)
   * Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)
2. **Your company makes a hardware firewall that runs a custom Linux kernel. What are your obligations under GPLv2?**
   * You must ensure your custom kernel runs on a regular Intel machine
   * There are no requirements
   * You must make the source t
3. **Which environment variable contains a list of directories that is searched for commands to execute?**
   * PATH
   * PS1
   * PS2
   * EXEC
4. **Select the command that can report the location of a command:**
   * what
   * which
   * where
5. **A pair of single quotes ( ‘ ) will prevent the shell from interpreting any metacharacter.**

**True or False?**

* + True
  + False

1. **A pair of double quotes (” ) will prevent the shell from interpreting any metacharacter.**

**True or False?**

* + True
  + False

1. **Using a pair of back quotes ( ` ) will cause a shell to execute the back-quoted text as a command and substitute the output back into the original command.**

**True or False?**

* + True
  + False

1. **The semicolon (;) can be used to separate multiple commands to be executed in order.**

**True or False?**

* + True
  + False

1. **The double ampersand characters (&& ) are used to separate commands to be executed conditionally, where if the command to the left of the ampersands fails, then the command to the right of the ampersands will be executed.**

**True or False?**

* + True
  + False

1. **To be able to output messages to the screen, use the \_\_\_\_\_\_\_ command:**
   * echo
   * print
   * display
   * type
2. **The \_\_\_\_\_\_\_ command will print a list of the commands that you’ve previously executed.**
   * list
   * eval
   * history
   * exec
3. **To execute the same command as previously executed five commands ago, you would type:**
   * @-5
   * !5
   * !-5
   * &5
4. **The shell program interprets the commands you type into the terminal into instructions that the Linux operating system can execute.**

**True or False?**

* + True
  + False

1. **The acronym CLI stands for:**
   * Computer Line Interface
   * Command Line Interpreter
   * Command Line Interface
   * Computer Link Interpreter
2. **What one character treats the character that follows it as if it was surrounded by single quotes?**
   * /
   * #
   * %
   * \
3. **The echo command:**
   * Copies variables from one to another
   * Tests a variable for duplication
   * Is used for variable assignment
   * Is used to output text to the console
   * Duplicates the input stream to the output stream
4. **The most common shell used for Linux distributions is the \_\_\_\_\_\_\_\_ shell.**
   * Fish
   * Bash
   * Tsch
   * Zsh
5. **HOME is an example of \_\_\_\_\_\_\_\_\_.**
   * An environment variable
   * A path vari
6. **What is the standard option to provide a command line program to view its documentation?**
   * -h
   * –info
   * –help
   * –doc
7. **The command man -k is the same as the command apropos.**

**True or False?**

* + True
  + False

1. **The whatis command is the same as man -w.**
   * False
   * True
2. **The directory where additional documentation for software packages most likely can be found is:**
   * /usr/software/doc
   * /var/lib/doc
   * /usr/share/doc
   * /var/share/doc
3. **Which two pager commands are used by the man command to control movement within the document?**

**(choose two)**

* + grep
  + less
  + page
  + more

1. **Commands typically executed by a user are covered in what section of the manual?**
   * 5
   * 3
   * 2
   * 1
2. **To search the man page sections for the keyword example, which of the following command lines could you execute?**

**(choose two)**

* + man -k example
  + apropos example
  + man -f example
  + whatis example

1. **The statement that describes the difference between a man page and an info page is:**
   * The man page is like a guide; the info page is a more concise reference.
   * The info page is like a guide; a man page is a more concise reference.
   * The man page is a long detailed reference; the info page is very terse.
   * There is very little difference between them.
2. **If you are reading the synopsis of a command from a man page, then items in square brackets are:**
   * Required arguments
   * Comments
   * Optional
   * Required options
3. **The following sections commonly appear on a man page:**

**(choose three)**

* + NAME
  + LICENSE
  + DESCRIPTION
  + SYNOPSIS

1. **Section 5 of the manual pages covers:**
   * System administration commands
   * Games
   * User commands
   * File Formats
2. **To start searching a man page, the first key you press is:**
   * f
   * /
   * s
   * !
3. **In order to exit viewing a man page, press:**
   * q
   * z
   * x
   * y
4. **To get help on using the info command, execute:**

**(choose two)**

* + man info
  + info -q
  + info info
  + help info

1. **To get help while using the info command, press:**
   * g
   * A
   * Shift+H
   * Shift+z
2. **To exit the info page, press:**
   * Q
   * x
   * z
   * x
3. **When interpreting the SYNOPSIS of a command found on a man page, the “|” means:**
   * The items it separates can be used together
   * The items it separates cannot be used together
4. **The \_\_\_\_\_ command is normally executed daily to update the database of all files that are on the system.**
   * find
   * locate
   * search
   * updatedb
5. **The \_\_\_\_\_ command is normally executed to search for a command or man page.**
   * updatedb
   * whereis
   * find
   * man -k
6. **The \_\_\_\_\_ command can be used to find any file, not just commands or man pages.**
   * apropos
   * whereis
   * whatis
   * locate
7. **The info command merges all available documentation into a single “book”.**

**True or False?**

* + True
  + False

1. **Section 9 of man pages relates to what?**
   * Library Calls
   * Games
   * Kernel Routines
   * System Calls
   * Miscellaneous
2. **The man command searches each of the sections in order until it finds a match.**

**True or False?**

* + True
  + False

1. **The whatis command will only return the first result for which section a man page is stored in.**

**True or False?**

* + True
  + False

1. **Hidden files are files that begin with what character?**
   * A plus (+)
   * An asterisk (\*)
   * A dash (-)
   * A period (.)
2. **What option for the ls command will display all files, including hidden files?**
   * -a
   * -L
   * -H
   * -w
3. **The top-level directory on a Linux system is represented as:**
   * /home
   * C:
   * /root
   * /
4. **Is the following path absolute or relative?**

/etc/ppp

* + Absolute
  + Relative

1. **Is the following path absolute or relative?**

sysadmin/Documents

* + Relative
  + Absolute

1. **Is the following path absolute or relative?**

../../home/sysadmin

* + Absolute
  + Relative

1. **The tilde (~) is used to represent:**
   * Any two single characters
   * Nothing; it has no special meaning
   * The directory above the current working directory
   * A user’s home directory
2. **Which of the following commands can be used to access the home directory of the user “bob” while logged in as root?  
   (choose two)**
   * cd &&
   * cd /home/bob
   * cd ~bob
   * ~bob
3. **The double dot (..) can be used with the cd command to represent:**
   * A user’s home directory.
   * Any two single characters
   * Nothing; it has no special meaning.
   * The directory above the current working directory
4. **The cd command by itself will take you to what directory?**
   * None; it is not a valid command
   * The system root directory
   * Your home directory
   * The directory above the current working directory
5. **What command will allow you to change your current working directory?**
   * list
   * chdir
   * ls
   * cd
6. **The double dot (..) can be used to represent the directory…**
   * …below the current directory.
   * …above the current directory.
   * …with any two single numbers.
   * …above the current directory only when using the cd command.
7. **The ls command without options or arguments…**
   * …prompts for a directory to list.
   * …generates an error as this command requires arguments.
   * …lists the contents of a user’s home directory.
   * …lists the contents of the current directory.
8. **The first character in a long listing (ls -l) indicates:**
   * The permissions
   * The owner
   * If something is a file, directory, or symbolic link
   * The size
9. **Which option for the ls command, when used in conjunction with the -l option, will display human-readable file sizes?**
   * -S
   * -H
   * -h
   * -M
10. **Which of the following commands will prevent any aliased options to the ls command?**
    * %ls
    * /ls
    * `ls
    * \ls
11. **The ls command color codes results by default.  
    True or False?**
    * True
    * False
12. **The command ls -S will sort files:**
    * By modification date, newest to oldest
    * By size, largest to smallest
    * By numb
13. **When using the cp command, you must provide both a source and a destination.**

**True or False?**

* + True
  + False

1. **Which option(s) can be used to prevent cp from overwriting an existing file?**

**(choose two)**

* + -z
  + -n
  + -N
  + -i

1. **The command rm -r will…**
   * remove a directory along with any files or subdirectories.
   * generate an error; -r isn’t a valid option.
   * remove only empty directories.
   * prompt for each confirmation before deleting each file in a directory.
2. **Which option can be used with the rm command to prompt before deleting?**
   * A
   * -P
   * l
   * -i
3. **The rm command can delete multiple files at once.**

**True or False?**

* + True
  + False

1. **Which of the following commands can be used to rename a file?**
   * cp
   * rm
   * mv
   * name
2. **The touch command can be used to:**

**(choose two)**

* + Update the timestamp of existing files
  + Change ownership of a file
  + Create new files
  + Change a file’s name

1. **Which of the following are glob characters?**

**(choose three)**

* + The square brackets “[” and “]”
  + The question mark “?”
  + The dash character “-“
  + The asterisk “\*”

1. **The main purpose of using glob characters is to be able to provide a list of filenames to a command.**

**True or False?**

* + True
  + False

1. **The asterisk character is used to represent zero or more of any character in a filename.**

**True or False?**

* + True
  + False

1. **Which of these commands will return /etc/gai.conf /etc/pam.conf /etc/ucf.conf?**

**(choose two)**

* + ls /etc/???.????
  + echo /etc/???.\*f
  + echo /etc/\*?.\*o?
  + ls /etc/p???.\*\*

1. **Brackets cannot be used to a represent a range of characters.**

**True or False?**

* + True
  + False

1. **Which command would list files that do not begin with a “T” or a “W”?**
   * echo /etc/\*[TW!]
   * echo /etc/!TW
   * echo /etc/[!TW]\*
   * echo /etc/[
2. **Compression of a file works by:**
   * Eliminating gaps within the file
   * Consolidating multiple files into one
   * Removing redundant information
   * Storing most of the data on removable media and just leaving a pointer
   * Removing the high order bit from each byte
3. **In general, for which of the following would you want to use lossless compression?**
   * An mp3 audio file
   * An encrypted email
   * A JPEG image
   * A log file
   * A movie
4. **Lossy compression:  
   (choose three)**
   * Usually results better compression than lossless
   * Is often used with images
   * Is often used with documents
   * Decompresses to an identical version as the original
   * Sacrifices some quality
5. **You type gzip myfile.tar. What happens?**

**(choose two)**

* + myfile.tar is unarchived into the current directory
  + An error; you forgot to pass the name of the output file
  + myfile.tar.gz holds a compressed version of myfile.tar
  + An error; you forgot to specify the file with -f
  + myfile.tar is removed

1. **How would you obtain output similar to the following?**
2. compressed uncompressed ratio uncompressed\_name

278168 1016950 72.6% tags

* + gzip –l tags
  + gunzip –t tags
  + file tags

1. **Which command would you use to archive the Documents directory and compress it with bzip2 compression?**
   * tar –fzc Documents documents.tbz
   * tar –cf Documents documents.tbz
   * tar –cjf Documents
   * tar –cjf documents.tbz Documents
   * tar –czf documents.tbz
2. **Which flag would you pass to tar in order to have it make a new archive?**
   * -t
   * -c
   * -n
   * -x
   * -j
3. **Which command will show what is inside the compressed tarball with a name of foo.tar.gz?**
   * tar –tjf foo.tar.gz
   * tar –lf foo.tar.gz
   * tar –tf foo.tar.gz
   * tar –xf foo.tar.gz
   * tar –tzf foo.tar.gz
4. **In the command tar -cvjf foo.tbz a b c, what are a, b, and c?**
   * Nothing; -cvjf only expects one parameter
   * File names to be added to the archive
   * a is the directory that will be prepended to files; b and c are files inside it
   * Matching operators; anything starting with a, b, or c will be added
   * Extra flags passed to tar
5. **Given the command tar –cvjf homedirs.tbz /home, which of the following are true?**

**(choose two)**

* + Only files starting with /home will be extracted from the archive
  + The command will print out each filename as it is processed
  + The /home directory will be restored with the contents of homedirs.tbz
  + Files that are present in the archive might overwrite files in /home
  + The output file will be compressed

1. **You archived your users’ directories into a file called backup.tar.gz. You then view the archive and see the filenames follow this convention:**

home/username/somefile

**How will you extract just the files for the user called *fred*?**

* + tar –xzf backup.tar.gz home/fred/
  + tar –tjf backup.tar.gz /home/fred
  + tar –xjf backup.tar.gz home/fred/
  + tar –xzf backup.tar.gz fred
  + tar –tzf /home/fred < backup.tar.gz

1. **Which of the following commands will create a zipfile with the contents of your Documents directory?**
   * zip –f mydocs.zip Documents
   * zip -r mydocs.zip Documents
   * zip –c mydocs.zip Documents
   * zip mydocs.zip Documents
   * zip -cf mydocs.zip Documents
2. **Given a file called documents.zip, how can you see what’s in it without extracting the files?**
   * zip -lf documents.zip
   * unzip -l documents.zip
   * unzip –list documents.zip
   * zip -l documents.zip
   * showzip documents.zip
3. **Given a file called documents.zip, how can you extract just the files under ProjectX?**
   * unzip documents.zip ProjectX/\*
   * unzip documents.zip | grep ProjectX
   * unzip documents.zip ProjectX
   * zip -x documents.zip ProjectX
   * unzip -t documents.zip ProjectX
4. **You try to compress a file that is already compressed. Which of the following statements is true?**
   * The file will not be compressed any further than it already was
   * The compression algorithm needs to be set to the “currently compressed” mode for it to be compressed further
   * The file changed while you were compressing it
   * The file will be deleted
   * The file will actually be uncompressed
5. **Which of the following commands can be used to compress a file?**

**(choose three)**

* + bunzip2
  + cat
  + zip
  + bzip2
  + gzip

1. **The three main modes of tar are:**

**(choose three)**

* + List
  + Create
  + Compress
  + Copy
  + Extract

1. **In the command tar -czf foo.tar.gz bar, what is the purpose of the f flag?**
   * Tells tar to copy only files, and not directories
   * Tells tar to read from the file that follows the flag
   * Tells tar to write to the file that follows the flag
   * Tells tar to print the name of each file as it is processed
   * Specifies extra compression is to be used
2. **Which two commands do the same thing?**

**(choose two)**

* + tar -czf foo.tar.gz foo
  + tar -tzf foo.tar.gz
  + tar -c foo | gzip > foo.tar.gz
  + tar -x foo | gzip
  + tar -xzf foo.tar.gz

1. **Which two programs use the Lempel-Ziv-Markov chain algorithm?**

**(choose two)**

* + xz
  + lossless
  + lossy
  + bzip
  + gzip

1. **By default, the zip command replaces uncompressed files with compressed files.**

**True or False?**

* + True
  + False

1. **Error messages generated by commands are sent where by default?**
   * STDERR
   * STDIN
   * Log files
   * STDOUT
2. **A successful command may, or may not print output to STDOUT.  
   True or False?**
   * True
   * False
3. **Which of the following commands will direct error messages to the file, error.log?**
   * ls /root >> error.log
   * ls /root > error.log
   * ls /root 2> error.log
   * ls /root $> error.log
4. **A pipe allows you to…**
   * …send the same input to multiple commands.
   * …type multiple commands at one prompt.
   * …send the output of one command to another.
   * …send the output of a command to a file.
5. **Channel 2 is:**
   * STDOUT
   * STDALL
   * STDERR
   * STDIN
6. **Which of the following commands will append its output to output.file?**
   * echo Testing >> output.file
   * echo Testing > output.file
   * output.file < echo Testing
   * echo Testing -> output.file
7. **Which command(s) can be used to sort the lines of list.file alphabetically and display it on the screen?**

**(choose two)**

* + sort < list.file
  + cat list.file >> sort
  + echo list.file > sort
  + cat list.file | sort

1. **Which option of the head command will display only the first five lines of a file?**
   * No option needed; head displays only five lines by default.
   * -n
   * -l 5
   * -n 5
2. **The grep command…**
   * …will display all the lines that begin with the specified Regular Expression.
   * …will display all the lines in a file containing the specified Regular Expression.
   * …will display the line numbers in a file that contain a specified Regular Expression.
   * …is not case sensitive.
3. **The grep command can be used with glob characters.**

**True or False?**

* + True
  + False

1. **Which of the following commands will display only lines that begin with start?**
   * grep \start file.txt
   * grep $start file.txt
   * grep \*start file.txt
   * grep ^start file.txt
2. **Which of the following commands will display only lines that begin with test?**
   * grep $test\* file.txt
   * grep \*test file.txt
   * grep &test file.txt
   * grep ^test file.txt
3. **Which of the following commands will display lines that contain either start or end?**
   * egrep ‘start|end’ file.txt
   * egrep (start|end) file.txt
   * egrep start end file.txt
   * egrep start&end file.txt
4. **Which of the following commands can be used to scroll through a text file?**

**(choose two)**

* + some
  + more
  + cat
  + less

1. **Which option for the cut command is used to specify a delimiter?**
   * -D
   * -f
   * =
   * -d
2. **Which option for the cut command is used to specify the field?**
   * -d
   * #
   * -D
   * -f
3. **Which option for the wc command will print the number of lines in a file?**
   * -w
   * -l
   * -L
   * -C
4. **Which option for the wc command will print the total number of words in a file?**
   * -l
   * -C
   * -L
   * -w
5. **Which command can be used to print line numbers?**
   * num
   * nl
   * ln
   * sort
6. **The command echo "text" > file.txt will create file.txt if it does not already exist.**

**True or False?**

* + True
  + False

1. **The command echo "text" > file.txt will not overwrite file.txt if it already exists.**

**True or False?**

* + True
  + False

1. **The command echo "text" >> file.txt will not overwrite file.txt if it already exists.**

**True or False?**

* + True
  + False
  + **A file begins with #!/bin/csh. This means:**
    1. This is a Perl script
    2. The operator should not be using /bin/csh
    3. C Shell compatibility mode is enabled
    4. Running the script will invoke /bin/csh to interpret the rest of the file
    5. Nothing, this is a comment
  + **Which are appropriate editors for writing shell scripts?  
    (choose two)**
    1. Firefox
    2. /bin/bash
    3. LibreOffice Writer
    4. vi
    5. nano
  + **Most of nano’s commands take the form of:**
    1. Mouse clicks
    2. Escape followed by another character
    3. Control and another character
    4. The F1 through F12 function keys
    5. Alt and another character
  + **What does this shell script do?**
  + FOO=/tmp/foo
  + if [ ! –d $FOO ]; then
  + mkdir $FOO

fi

* + 1. Creates /tmp/foo if it does not exist
    2. Outputs a message to the screen
    3. Creates /tmp/foo and raises an error if there is a problem
    4. Nothing, since there is a problem with the conditions in the if statement
    5. Makes the /tmp/foo directory if a file by that name exists
  + **Which of the following are correct about for and while loops?**

**(choose two)**

* + 1. for loops have a test each cycle to determine if it should run again
    2. for loops operate over a fixed list of items
    3. for loops require a variable over which to iterate
    4. while loops operate over a fixed list of items
    5. while loops have a test each cycle to determine if it should run again
  + **Given the following part of a script:**
  + if [ -f $1 ]; then
  + echo “I am here”
  + fi

**What is the meaning of $1?**

* + 1. It is a parameter to -f, indicating the size of the file
    2. It is the first argument passed to the script
    3. It is a special variable that indicates the exit code of the command before it
    4. It is a file called $1
    5. It is a list of files that gets interpolated
  + **Given the following script that is run through ./test.sh hello goodbye:**
  + if [ -f $2 ]; then
  + echo "I am here"
  + fi

**When will “I am here” be printed?**

* + 1. If a file called “goodbye” exists in the current directory
    2. Never
    3. The script will always print “I am here”
    4. If there are two files in the current directory
    5. If a file called “hello” exists in the current directory
  + **What is the correct way to assign the word “Hello” to a variable?**
    1. A = “Hello”
    2. echo “Hello” &gt; A
    3. echo $A “Hello”
    4. $A=”Hello”
    5. A=”Hello”
  + **What is the correct way to save the current directory to a variable?**
    1. A=`pwd`
    2. pwd | $A
    3. A=cwd
    4. A=pwd
    5. pwd $A
  + **Which shell command accepts input from the user’s keyboard?**
    1. echo
    2. read
    3. gets
    4. input
    5. $1
  + **What information is held inside $? ?**
    1. The name of the command run
    2. The previous command’s exit code
    3. The number of arguments passed to the script
    4. The current process id
    5. The current user ID
  + **How would you finish your script with an exit code of 42?**
    1. return 42
    2. break 42
    3. CODE=42
    4. exit 42
    5. $?=42
  + **The if command looks for what exit code to consider a condition to be true?**
    1. 1
    2. 0
    3. 2
    4. 10
    5. 255
  + **The number of users logged in is in a variable called USERS. How would you test to see if 5 users are logged in?**
    1. test $USERS –eq 5
    2. test –f USERS=5
    3. test $USERS = 5
    4. test $USERS,5
    5. test $USERS –a 5
  + **Given the following script:**
  + while [ ! –f /tmp/foo ]; do
  + echo –n “.”
  + process\_data > /tmp/foo
  + done

**Which of the following are true?**

**(choose two)**

* + 1. The screen will fill with dots.
    2. If a file called /tmp/foo exists, process\_data won’t be run
    3. process\_data will be called at most once
    4. process\_data will never be run
    5. /tmp/foo will be removed if it exists
  + **A conditional that lets you make multiple comparisons with a pattern is called:**
    1. fanout
    2. case
    3. if
    4. branch
    5. test
  + **What is the meaning of $(( $i + 1)) ?**
    1. 1 will be added to the i variable
    2. If i is 0, the loop will stop
    3. This will return the value of the next argument to the script
    4. This will return the value of the first argument to the script
    5. This runs the command stored in variable i
  + **How would you write a test that says “if /tmp/foo is a directory or USERS is greater than 5”?**
    1. test –d /tmp/foo –o $USERS –gt 5
    2. test –d /tmp/foo | $USERS > 5

1. **Which of the following are valid CPU types for Intel-based platforms?  
   (choose two)**
   * 64-bit
   * 32-bit
   * 48-bit
   * 24-bit
2. **64 bit platforms can access more memory than 32 bit platforms.**

**True or False?**

* + True
  + False

1. **Choose all of the following statements that are true in regard to virtual RAM:  
   (choose three)**
   * Virtual RAM is stored on a hard drive
   * Virtual RAM is stored in the CPU
   * Virtual RAM is used when available physical RAM is low.
   * Virtual RAM is also called swap space
2. **Which of the following are common busing systems?**

**(choose two)**

* + CPU
  + BIOS
  + USB
  + RAM
  + PCI

1. **A division of a hard drive may be referred to as a \_\_\_\_\_\_\_ .**
   * block
   * partition
   * portion
   * label
2. **Which of the following are valid partitioning types?**

**(choose two)**

* + GPT
  + PC
  + MBR
  + BIOS

1. **The fdisk command is a tool used for working with the MBR partitioned disks.**

**True or False?**

* + True
  + False

1. **Which of the following is the valid device file name for the first IDE hard drive on the system?**
   * /dev/ide
   * /dev/hda
   * /dev/sda
   * /dev/hd1
2. **Which of the following are valid video cable connector types?  
   (choose two)**
   * HDA
   * VGA
   * AMD
   * DVI
3. **Which of the following commands will display CPU information?**

**(choose two)**

* + lscpu
  + cpuinfo
  + lspic
  + arch
  + showcpu

1. **What are the advantages of solid state disks when compared to traditional spinning platter hard disks?**

**(choose two)**

* + Less heat
  + Faster system boot times
  + Higher capacity
  + Low cost
  + Low power consumption

1. **Software that allows hardware devices to communicate with the installed operating system is called?**
   * Instructions
   * Drivers
   * Packages
   * Programs
2. **Which of the following commands will check hard disk MBR partitions?**

**(choose three)**

* + fdisk
  + gfdisk
  + gdisk
  + cfdisk
  + sfdisk

1. **Which of the following commands will check hard disk GPT partitions?**

**(choose three)**

* + gdisk
  + sgdisk
  + sfdisk
  + gfdisk
  + cgdisk
  + **When you execute the dmesg command, the system displays messages that are generated by the kernel.**

**True or False?**

* + 1. True
    2. False
  + **The Linux kernel mounts the following pseudo-filesystems to provide access to information about hardware devices connected to the system:**

**(choose two)**

* + 1. /devices
    2. /proc
    3. /info
    4. /sys
  + **The /proc directory contains a subdirectory for each process present on the system.**

**True or False?**

* + 1. True
    2. False
  + **The Process ID (PID) of the init process is:**
    1. 0
    2. 1
    3. 100
    4. varies
  + **The process (ps) command shows only processes running in the current shell by default.**

**True or False?**

* + 1. True
    2. False
  + **The following system load averages are displayed by the top command:**

**(choose three)**

* + 1. 15 minute
    2. 1 minute
    3. 10 minute
    4. 5 minute
  + **The free command outputs statistics about:**
    1. CPU usage
    2. Software usage
    3. Memory usage
    4. Disk usage
  + **What directory typically contains log files?**
    1. /proc/loc
    2. /log
    3. /usr/log
    4. /var/log
  + **Which log file contains messages regarding authentication and authorization?**
    1. secure
    2. dmesg
    3. syslog
    4. messages
  + **All log files contain only text data.**

**True or False?**

* + 1. True
    2. False
  + **A load average of 1.0 always means the system is fully loaded.**

**True or False?**

* + 1. True
    2. False
  + **A command that will continuously update statistics about running processes:**
    1. tail
    2. head
    3. top
    4. Bottom
  + **Which of the following is a valid Linux option style for Traditional Unix:**
    1. two dashes (–)
    2. slash (/)
    3. no dash
    4. a single dash (-)
  + **Which file contains the information passed to the kernel at boot time?**
    1. /proc/kargs
    2. /proc/kopts
    3. /proc/cmdline
    4. /proc/kernel
  + **To make changes permanent for kernel parameter files found under /proc/sys, the following file can have entries added to it:**
    1. /etc/sysinfo.conf
    2. /etc/procctl.conf
    3. /etc/sysctl.conf
    4. /etc/procsys.conf
  + **The /var directory has files that change over time.**

**True or False?**

* + 1. True
    2. False
  + **Information about the init process can be found in the /proc/1 directory.**

**True or False?**

* + 1. True
    2. False
  + **Which of the following commands will allow you to view all processes on the system?**

**(choose two)**

* + 1. ps -ef
    2. ps
    3. ps -A
    4. ps aux
    5. ps -eLf
  + **The logging daemon on recent Linux distributions based on systemd is called:**
    1. klogd
    2. journald
    3. rsyslogd
    4. syslogd
  + **What does the acronym FHS stand for among the the standards supported by the Linux Foundation?**
    1. Filesystem Hierarchy Standard
    2. File Hierarchy Standard
    3. Filesystem Hierarchy Structure
  + **Which directory is the root of the filesystem?**
    1. /sys
    2. /root
    3. /
    4. /home
    5. /var
  + **The sbin directories are primarily intended to be used by the root user.**

**True or False?**

* + 1. True

1. **Which of the following would be considered a host?**
   * A printer attached to the network via an IP address
   * A network cable
   * A CD-ROM
   * The computer’s hard drive
2. **A service is…**
   * …like an IP address.
   * …a file that contains configuration information.
   * …another name for a computer’s hostname.
   * …a feature provided by one computer to another.
3. **A network packet contains …**

**(choose two)**

* + …the IP address of the source machine.
  + …a hard drive partition.
  + …the name of the router.
  + …the IP address of the destination machine.

1. **Only servers have hostnames.**

**True or False?**

* + True
  + False

1. **Which of the following protocols defines how network communication functions?**
   * DHCP
   * DNS
   * TCP/IP
   * SSH
2. **Which of the following are valid IPv4 addresses?**

**(choose two)**

* + 192.105.10.10.2
  + 192.301.25.25
  + 10.33.55.77
  + 192.105.10.10

1. **Which of the following commands will display the IP address on a Linux system?**
   * ifconfig
   * dig
   * route
   * ipconfig
2. **Which of the following commands will display the routing table?**

**(choose two)**

* + dig
  + netstat -r
  + ifconfig
  + route

1. **Which of the following commands will allow you to log into a remote machine?**
   * dig
   * netstat
   * route
   * ssh
2. **What option to the netstat command has information shown as numbers rather than names?**
   * –name
   * -r
   * -t
   * -n
3. **Which of the following commands will allow you to log into the machine server1 with the account name nick?**
   * ssh nick&server1
   * ssh nick-server1
   * ssh nick@server1
   * ssh nick->server1
4. **The RSA key fingerprint allows the dig command to connect to remote systems.**

**True or False?**

* + True
  + False

1. **When looking at the primary IPv4 configuration file, if the device was configured to be a DHCP client, then the BOOTPROTO value would be set to none.**

**True or False?**

* + True
  + False

1. **When issuing the service network restart command, which of the following occurs?**
   * …brings up all network interfaces, re-reads all related configuration files and then the networking for the system is restarted.
   * …the networking for the system is stopped and then started back up.
   * …takes down all network interfaces, re-reads all related configuration files and then the networking for the system is restarted.
2. **Which of the following files contains the IP addresses of the name servers the system should consult in any attempt to resolve names to IP addresses?**
   * /etc/nsswitch.conf
   * /etc/resolve.conf
   * /etc/hosts
   * /etc/resolv.conf
3. **Which of the following commands can be used to display socket statistics, and supports all major packet and socket types?**
   * ss
   * ifconfig
4. **Which files contain user account information?  
   (choose two)**
   * /etc/shadow
   * /etc/group
   * /etc/passwords
   * /etc/passwd
5. **Which user can view the /etc/shadow file?**
   * Any member of the password group
   * No users
   * The root user
   * All users
6. **Which command will display the UID, GID and groups your current user belongs to?**
   * whoami
   * Who
   * id
   * about
7. **Each user belongs to at least one group.**

**True or False?**

* + True
  + False

1. **Which command will display the users that are currently logged in to the system?**
   * about
   * who
   * id
   * whoami
2. **The sudo command allows regular users to…**
   * …execute commands as another user.
   * …execute any command as root, after providing the root password.
   * …run any command as root, after providing the sudo password.
   * …run any commands as a system account without logging in.
3. **Which of the following commands will display the group(s) a user belongs to?**
   * all
   * id
   * whoami
   * group
4. **Which of the following commands will display the groups that the user bob belongs to?**
   * group bob
   * id bob
   * groups -a
   * all bob
5. **The /etc/group file follows what structure?**
   * group:GID:user\_list
   * groups -a
   * user:group
   * group\_name:password\_placehoder:GID:user\_list
6. **A GID is associated with a group name.**

**True or False?**

* + True
  + False

1. **A user can belong to…**
   * At least 16 groups
   * Only five groups
   * Only groups with a GID over 500
   * Only one group
2. **Sudo privileges can be used to specify which user can use the sudo command to execute commands as other users.**

**True or False?**

* + True
  + False

1. **In distributions that do not allow the root user to login directly or via the su command, the installation process automatically configures one user account to be able to use the sudo command to execute commands as if they were executed by the *root* user.**

**True or False?**

* + True
  + False

1. **Which of the following commands will display how long the system has been running since the last boot?**

**(choose two)**

* + who
  + id
  + uptime
  + w

1. **The /etc/shadow file contains plain-text passwords.**

**True or False?**

* + True
  + False

1. **Which command can be used to view the /etc/passwd file entries?**
   * uptime
   * uppasswd
   * getpasswd
   * getent
2. **All Linux systems allow administrators to log in as root.**

**True or False?**

* + True
  + False

1. **What is the default user for the su command?**
   * All users
   * The root user
   * Any member of the password group
   * The most recently created user
2. **Which command would allow a user to execute commands as root?**
   * whoami
   * about
   * sudo
   * who
   * grep
3. **File permissions cannot be edited by the root user.**

**True or False?**

* + True
  + False

1. **Which command is used to display only the user’s primary group?**
   * who
   * id -g
   * man
   * whoami
   * about
2. **Traditional UNIX systems allowed users to belong to how many groups?**
   * 10,000
   * 1
   * 65,000
   * 256
   * 16
3. **What would an account with the UID 376 typically be used for?**
   * White hat hackers.
   * Temporary employees.
   * New users with full privileges.
   * System service access.
   * Root user access.
4. **Usernames cannot be the same as group names.**

**True or False?**

* + True
  + False

1. **To display the group(s) a user belongs to use this command:**
   * all
   * id
   * grep
   * group
   * whoami
2. **Which command will display the groups that the root user belongs to?**
   * all -t
   * groups -a
   * id root
   * all
   * group -r
3. **A value of 0 in the “minimum” password aging field means the user *cannot* change their password.**

**True or False?**

* + True
  + False

1. **The “Epoch” began on January 1, 1970.**

**True or False?**

* + True
  + False

1. **The last command displays reboot records…**
   * By default
   * Never
   * Only when issued by the root user
   * After restarting the system
   * When issued with the -p switch
2. **Sudo privileges allow users to execute commands as another user.**

**True or False?**

* + True
  + False

1. **When using the sudo command to execute a command as the root user, the command prompts for the user’s own password, not that of the *root* user.**

**True or False?**

* + True
  + False

1. **The first line of this command displays how long the system has been running since being rebooted.**
   * su
   * getent
   * w
   * id
   * who
2. **The /etc/shadow file contains encrypted passwords.**

**True or False?**

* + True
  + False

1. **Which command can be used to view the /var/log/wtmp file entries?**
   * getent
   * uptime
   * getpasswd
   * uppasswd
   * last

## NDG Linux Essentials 2.0 Chapter 16 Exam Answers

### UIDs 1-499 are usually reserved for what kind of users?

* + Remote log-in accounts
  + Are not used for user accounts, but for group accounts
  + System accounts, such as server processes
  + Log-in (human) users

### If a user is deleted, the files and directories that the user owned…

* + …will have no user owner.
  + …will have no UID owner.
  + …will show a UID as the owner, but not user name.
  + …are deleted as well.

### Which of the following options for the useradd command allows root to specify the UID to be associated with the account?

* + -g
  + -G
  + -u
  + -M

### Which of the following options for the useradd command allows root to specify supplementary groups the user will be a member of?

* + -G
  + -u
  + -g
  + -U

### On a system that does not use UPG, the useradd command will also create a user group. For example, user bob, group bob.

### True or False?

* + True
  + False

### Which of the following commands will add the group extra to the user bob‘s secondary groups in addition to bob‘s current secondary groups?

* + usermod -G extra bob
  + usermod -ag bob extra
  + usermod -aG extra bob
  + usermod -a extra bob

### Which option for the usermod command can be used to specify a user’s group ID (either primary or secondary)?

### (choose two)

* + -s
  + -g
  + -S
  + -G

### For non-root users, the passwd command can only be used to change the password of the user running the command.

### True or False?

* + True
  + False

### The groupmod command can be used to change a group name.

### True or False?

* + True
  + False

### The groupmod command can be used to change a group GID.

### True or False?

* + True
  + False

### The groupmod command can be used to add users to a group.

### True or False?

* + True
  + False

### Which of the following commands can be used to modify a group?

* + groupmod
  + groupadd
  + modgroup
  + addgroup

### Which command can be used to determine a user’s most recent log in?

* + history
  + last
  + login
  + shell

### Which of the following files contains encrypted user password information?

* + /etc/usr
  + /etc/group
  + /etc/passwd
  + /etc/shadow

### Which of the following files contains user IDs?

* + /etc/group
  + /etc/passwd
  + /etc/usr
  + /etc/shadow

### Which of the following files does the groupadd command use to determine the new GID when a GID isn’t specified?

* + /etc/usr
  + /etc/shadow
  + /etc/passwd
  + /etc/group

### Which of the following commands, run as root, will prevent the user bob from logging in?

* + usermod -L bob
  + usermod -l bob
  + usermod -D bob
  + usermod -d bob

### What directory contains a user’s home directory?

* + /user
  + /
  + /home
  + /rootfs

### GIDs under 500 (or 1000) are usually reserved for what kind of groups?

* + System use
  + Are not used for groups, but for user accounts
  + Administrators
  + User private groups (UPG)

### If a user is deleted, the files and directories that the user owned…

* + …are deleted as well.
  + …will have no user owner.
  + …may be important for others in the organization
  + …will have no UID owner.

### Which of the following options for the useradd command allows you to use a different primary group then the default?

* + -g
  + -G
  + -U
  + -u

### On a system that uses UPG, the UID must not be the same as the GID..

### True or False?

* + True
  + False

### The usermod command can be used to unlock a users account with the following option.

* + -s
  + -u
  + -f
  + -U

### Which of the following options for the useradd command allows you to use a different login shell than the default?

* + -g
  + -s
  + -u
  + -U

### Which of the following commands will add the group extra to the user jane’s secondary groups in addition to jane‘s current secondary groups?

* + usermod -a extra jane
  + usermod -ag jane extra
  + usermod -aG extra jane
  + usermod -G extra jane

### Which option for the usermod command can be used to specify a user’s primary group ID?

* + -g
  + -S
  + -G
  + -s

### For root users, the passwd command can only be used to change the password of the user running the command.

### True or False?

* + True
  + False

### The userdel -r command will…

* + …will prompt before deleting each file owned by a user.
  + …delete the user account, but leave the user’s files by default.
  + …automatically delete a user and the user’s home directory and mail spool and their contents.
  + …automatically delete a user and all the files owned by that user.

### The groupmod command can be used to change a group name.

### True or False?

* + True
  + False

### The groupmod command cannot be used to change a group GID.

### True or False?

* + True
  + Fasle

### The groupdel command can be used to delete primary groups.

### True or False?

* + True
  + Fasle

### Which of the following commands can be used to modify a user?

* + adduser
  + moduser
  + useradd
  + usermod

### Which command can be used to determine a user’s most recent log in?

* + history
  + shell
  + login
  + last

### The /etc/passwd file contains encrypted user password information. True or False?

### True or False?

* + False
  + True

### Which of the following files contains group IDs?

* + /etc/passwd
  + /etc/usr
  + /etc/shadow
  + /etc/group

### Which command allows you to view or change some of the default values used by the useradd command?

* + useradd -D
  + useradd -r
  + modvalue
  + useradd -f

### Which of the following commands, run as root, will prevent the user jane from logging in?

* + usermod -d jane
  + usermod -D jane
  + usermod -L jane
  + userm

1. **Which of the following commands set “other” permissions on file to r-x?**
   * chmod o-r-w file
   * chmod o+rx file
   * chmod o=rx file
   * chmod o=r+x file
2. **Which of the following commands sets “other” permissions on file to r-x?**
   * chmod 775 file
   * chmod 776 file
   * chmod 777 file
   * chmod 774 file
3. **Only one set (user, group, other) of permission can be changed at once using the symbolic method.**

**True or False?**

* + True
  + False

1. **Which of the following are methods for setting permissions using the chmod command?**

**(choose two)**

* + letter
  + primary
  + symbolic
  + octal

1. **The chown command can be used to change the owner and group of a file.**

**True or False?**

* + True
  + False

1. **The user sysadmin will be able to read a file because they own it.**

**True or False?**

* + True
  + False

1. **The user sysadmin will be able to change the permissions of a file because they own it.**

**True or False?**

* + True
  + False

1. **Octal notation uses the following values for the permissions granted:**
   * r = 7, w = 5, x = 0
   * r = 3, w = 2, x = 1
   * r = 4, w = 2, x = 0
   * r = 4, w = 2, x = 1
2. **Which of the following permissions would allow all users to add, view, and delete files in a directory?**
   * 750
   * 775
   * 666
   * 777
3. **A user cannot delete a file if they do not own it.**

**True or False?**

* + True
  + False

1. **The “execute” permission on a directory allows you to:**

**(choose three)**

* + Along with write permission to successfully delete the directory
  + Along with read permission to successfully perform ls -l
  + Along with write permission to successfully create new files
  + Change to that directory or use it as part of a path

1. **The “execute” permission on a file allows you to:**
   * Move the file to a new directory
   * Delete the file
   * Run the file as a script
   * This permission isn’t meaningful for text files.
2. **The chgrp command can be used on a file by:**
   * A user that belongs to the files current group
   * Only the file owner
   * The file owner and root
   * Only root
3. **The chown command can be used to change the user owner on a file by:**
   * The file owner
   * Only root
   * The file owner and root
   * A user that belongs to the files current group
4. **The chmod command can be used on a file by:**
   * Only root
   * A user that belongs to the files current group
   * The file owner
   * The file owner and root
5. **The “execute” permission is never set on files by default.**

**True or False?**

* + True
  + False

1. **Which of the following chown commands will change the myFile user ownership to the user sam and the group ownership to administrators?**

**(choose two)**

* + chown sam administrators myFile
  + chown sam.administrators myFile
  + chown sam:administrators myFile
  + chown sam+administrators myFile

1. **The chown command permits changing group ownership done by root only.**

**True or False?**

* + True
  + False

1. **The user owner of a file will always have the same or higher permissions as “other”.**

**True or False?**

* + True
  + False

1. **Which of the following commands will list hidden files as well as their ownership?**
   * ls -la
   * ls -l
   * ls -a
   * ls -z
2. **The /tmp directory is a temporary directory designed as a location where any user can create a temporary file.**

**True or False?**

* + True
  + False

1. **The “sticky bit” permission…**
   * …sets the group ownership of any new file created in a directory.
   * …prevents others from removing files they don’t own from a common directory.
   * …changes the group ownership of existing files in a directory.
   * …prevents others from overwriting files they don’t own in common directories.
2. **Which of the following commands will set the “sticky bit” on /shared ?**
   * chmod 2777 /shared
   * chmod 1777 /shared
   * chmod 6777 /shared
   * chmod 4777 /shared
3. **The “setuid” permission…**
   * …prevents the owner of a file from being changed.
   * …allows files in a directory to be manipulated as by the directory owner.
   * …reports the output of a script to the owner.
   * …allows a command to be run as the file owner.
4. **Which of the following commands will set setuid for /usr/bin/program?**
   * chmod 4755 /usr/bin/program
   * chmod 2755 /usr/bin/program
   * None of the above
   * chmod 1755 /usr/bin/program
5. **The “setgid” permission…**

**(choose two)**

* + …prevents the group owner of a file from being changed.
  + …allows a command to be run as the group owner of the file.
  + …allows files created in a directory to be owned by the group that owns the directory.
  + …can only be set on files.

1. **Which of the following commands will set setgid on /shared ?**
   * None of the above
   * chmod 2777 /shared
   * chmod 1777 /shared
   * chmod 4777 /shared
   * chmod 4777 /shared
2. **Which of the following long listings represents setgid set for /shared ?**
   * drwxrwsrwx. 12 root group 4096 Oct 21 13:12 /shared
   * drwsrwxrwx. 12 root group 4096 Oct 21 13:12 /shared
   * drwxrwxrws. 12 root group 4096 Oct 21 13:12 /shared
   * drwSrwxrwx. 12 root group 4096 Oct 21 13:12 /shared
3. **Setting setgid on a directory…**
   * …will allow scripts in the directory to be executed as the group owner of the directory.
   * …is not allowed by the system.
   * …does nothing.
   * …will set the group owner of all files created in the directory to the group owner of the directory.
4. **Deleting a source file will break an associated hard link.**

**True or False?**

* + True
  + False

1. **A source and a hard link must be part of the same filesystem.**

**True or False?**

* + True
  + False

1. **Deleting a source file will break an associated symbolic link.**

**True or False?**

* + True
  + False

1. **A source file and a symbolic link must be part of the same file system.**

**True or False?**

* + True
  + False

1. **Which of the following commands would create a hard link, *link* to *file*?**
   * ln file link
   * ln link file
   * ln -s file link
   * ln -s link file
2. **Which of the following commands would create a symbolic link, *link* to *file*?**
   * ln file link
   * ln -s link file
   * ln link file
   * ln -s file link
3. **Which of the following ls commands, when executed, will only show information about the directory itself?**

**(choose two)**

* + ls -h
  + ld -d
  + ls -ld
  + ld -a

1. **Which of the following directories are designed as locations where any user can create a temporary file?**

**(choose two)**

* + /sbin
  + /lost+found
  + /tmp
  + /home
  + /var/tmp

1. **The most popular Linux platform for mobile phones is:**
   * Android
   * Slackware
   * BlackBerry
   * IOS
   * MobileLinux
2. **The release cycle:**
   * Only has meaning for paid software
   * Describes how long software will be supported
   * Should be long so that you have time before you need to upgrade
   * Should be short so you always have the freshest releases
   * Dictates how often software is updated
3. **What does a distribution provide to add and remove software from the system?**
   * Package Manager
   * Application Programming Interface (API)
   * Partitioning tool
   * Compiler
   * Bash
4. **A maintenance cycle:**
   * Describes how often updates for software come out
   * Should be short so you always have the freshest releases
   * Describes how long a version of software will be supported
   * Only has meaning for paid software
   * Should be long so that you have time before you need to upgrade
5. **When choosing a distribution of Linux, you should consider:**

**(choose five)**

* + Popularity on social media
  + Does the distribution offer a “stable” version
  + Does your organization require long-term support for the system
  + If the application software is supported by the distribution
  + Will users require a GUI
  + Will commercial support be required for the OS

1. **Which of the following are examples of desktop software?**

**(choose two)**

* + File share
  + Compiler
  + Music player
  + Web server
  + Web browser

1. **Which of the following pieces of software deal with file sharing?**

**(choose three)**

* + Netatalk
  + Samba
  + X-Windows
  + NFS
  + PostgreSQL

1. **The Linux shell:**

**(choose three)**

* + Is responsible for tracking the location of configuration files
  + Has a scripting language
  + Has a built-in text editor
  + Is customizable
  + Allows you to launch programs

1. **Virtualization means:**
   * Many users can share one hard drive
   * A user can connect to a server over the network and use a virtual console
   * A machine can swap memory to disk
   * A single host can be split up into multiple guests
   * Two users get different memory spaces on the same machine
2. **In graphical mode, you can get to a shell by running which applications?**

**(choose two)**

* + Gbash
  + Guiterm
  + Terminal
  + Xterm
  + console

1. **Source code refers to:**
   * A human-readable version of computer software
   * The interface that software uses to talk to the kernel
   * The version of a program that the computer runs on the CPU
   * The license that dictates how you may use and share the software
2. **Open source means:**

**(choose two)**

* + You can modify the software’s source code
  + You must share your changes
  + You must support the software you share
  + You cannot charge anything for the software
  + You can view the software’s source code

1. **A copyleft provision in a software license means:**
   * You give up your copyright to the software
   * You may not link against third party closed source software
   * You must provide support for your modifications
   * You must provide free copies of the software if you use it
   * If you redistribute the software, you must distribute the source to any changes you make
2. **Linux is distributed under which license?**
   * MIT
   * GPLv2
   * GPLv3
   * Linux Foundation
   * BSD
3. **Creative Commons licenses allow you to:**

**(choose three)**

* + Receive royalties on the use of the work
  + Allow or disallow commercial use
  + Specify whether or not people may distribute changes
  + Get a veto on where the work is used
  + Specify whether or not changes must be shared

1. **Which environment variable contains a list of directories that is searched for commands to execute?**
   * PS2
   * PATH
   * EXEC
   * PS1
2. **Select the command that can report the location of a command:**
   * what
   * where
   * which
3. **A pair of double quotes (" ) will prevent the shell from interpreting any metacharacter.**

**True or False?**

* + True
  + False

1. **The shell program interprets the commands you type into the terminal into instructions that the Linux operating system can execute.**

**True or False?**

* + True
  + False

1. **The acronym CLI stands for:**
   * Command Line Interface
   * Computer Link Interpreter
   * Command Line Interpreter
   * Computer Line Interface
2. **The most common shell used for Linux distributions is the \_\_\_\_\_\_\_\_ shell.**
   * Zsh
   * Fish
   * Tsch
   * Bash
3. **Which two pager commands are used by the man command to control movement within the document?**

**(choose two)**

* + more
  + page
  + grep
  + less

1. **To search the man page sections for the keyword example, which of the following command lines could you execute?**

**(choose two)**

* + man -k example
  + apropos example
  + man -f example
  + whatis example

1. **The statement that describes the difference between a man page and an info page is:**
   * The man page is a long detailed reference; the info page is very terse.
   * There is very little difference between them.
   * The man page is like a guide; the info page is a more concise reference.
   * The info page is like a guide; a man page is a more concise reference.
2. **The following sections commonly appear on a man page:**

**(choose three)**

* + SYNOPSIS
  + NAME
  + LICENSE
  + DESCRIPTION

1. **The top-level directory on a Linux system is represented as:**
   * /
   * /home
   * C:
   * /root
2. **The tilde (~) is used to represent:**
   * Nothing; it has no special meaning
   * Any two single characters
   * The directory above the current working directory
   * A user’s home directory
3. **The cd command by itself will take you to what directory?**
   * The directory above the current working directory
   * None; it is not a valid command
   * Your home directory
   * The system root directory
4. **What command will allow you to change your current working directory?**
   * ls
   * list
   * chdir
   * cd
5. **The first character in a long listing (ls -l) indicates:**
   * If something is a file, directory, or symbolic link
   * The size
   * The permissions
   * The owner
6. **Which of the following commands can be used to rename a file?**
   * rm
   * cp
   * name
   * mv
7. **The touch command can be used to:**

**(choose two)**

* + Change ownership of a file
  + Create new files
  + Change a file’s name
  + Update the timestamp of existing files

1. **Which of the following are glob characters?**

**(choose three)**

* + The question mark “?”
  + The dash character “-“
  + The square brackets “[” and “]”
  + The asterisk “\*”

1. **The main purpose of using glob characters is to be able to provide a list of filenames to a command.**

**True or False?**

* + True
  + False

1. **The asterisk character is used to represent zero or more of any character in a filename.**

**True or False?**

* + True
  + False

1. **Compression of a file works by:**
   * Removing the high order bit from each byte
   * Eliminating gaps within the file
   * Storing most of the data on removable media and just leaving a pointer
   * Removing redundant information
   * Consolidating multiple files into one
2. **Lossy compression:**

**(choose three)**

* + Usually results better compression than lossless
  + Is often used with images
  + Sacrifices some quality
  + Is often used with documents
  + Decompresses to an identical version as the original

1. **Which of the following commands can be used to compress a file?**

**(choose three)**

* + zip
  + bzip2
  + gzip
  + bunzip2
  + cat

1. **The three main modes of tar are:**

**(choose three)**

* + Copy
  + List
  + Compress
  + Extract
  + Create

1. **In the command tar -czf foo.tar.gz bar, what is the purpose of the f flag?**
   * Tells tar to write to the file that follows the flag
   * Tells tar to print the name of each file as it is processed
   * Tells tar to read fro
2. **Which of the following are traits of a multiuser operating system?**

**(choose three)**

* + Resources are shared between users
  + Users can protect their information from other users
  + Many users can log in simultaneously with a unique account
  + Each user can only log in once per day
  + An administrative user gets a dedicated CPU

1. **A pipe allows you to…**
   * …send the same input to multiple commands.
   * …type multiple commands at one prompt.
   * …send the output of one command to another.
   * …send the output of a command to a file.
2. **Channel 2 is:**
   * STDALL
   * STDOUT
   * STDERR
   * STDIN
3. **The grep command…**
   * …will display all the lines that begin with the specified Regular Expression.
   * …will display all the lines in a file containing the specified Regular Expression.
   * …is not case sensitive.
   * …will display the line numbers in a file that contain a specified Regular Expression.
4. **Which of the following commands can be used to scroll through a text file?**

**(choose two)**

* + cat
  + less
  + some
  + more

1. **Which command can be used to print line numbers?**
   * ln
   * nl
   * sort
   * num
2. **Which are appropriate editors for writing shell scripts?**

**(choose two)**

* + LibreOffice Writer
  + vi
  + Firefox
  + nano
  + /bin/bash

1. **Which of the following are correct about for and while loops?**

**(choose two)**

* + while loops operate over a fixed list of items
  + for loops have a test each cycle to determine if it should run again
  + while loops have a test each cycle to determine if it should run again
  + for loops operate over a fixed list of items
  + for loops require a variable over which to iterate

1. **What is the correct way to assign the word “Hello” to a variable?**
   * $A=”Hello”
   * A = “Hello”
   * echo “Hello” &gt; A
   * A=”Hello”
   * echo $A “Hello”
2. **What is the correct way to save the current directory to a variable?**
   * pwd $A
   * A=cwd
   * A=`pwd`
   * A=pwd
   * pwd | $A
3. **What is the meaning of $(( $i + 1)) ?**
   * If i is 0, the loop will stop
   * This runs the command stored in variable i
   * This will return the value of the next argument to the script
   * 1 will be added to the i variable
   * This will return the value of the first argument to the script
4. **Which of the following are valid CPU types for Intel-based platforms?**

**(choose two)**

* + 64-bit
  + 24-bit
  + 32-bit
  + 48-bit

1. **Choose all of the following statements that are true in regard to virtual RAM:**

**(choose three)**

* + Virtual RAM is stored in the CPU
  + Virtual RAM is also called swap space
  + Virtual RAM is stored on a hard drive
  + Virtual RAM is used when available physical RAM is low.

1. **A division of a hard drive may be referred to as a \_\_\_\_\_\_\_ .**
   * label
   * block
   * portion
   * partition
2. **The fdisk command is a tool used for working with the MBR partitioned disks.**

**True or False?**

* + True
  + False

1. **Which of the following commands will display CPU information?**

**(choose two)**

* + cpuinfo
  + lscpu
  + showcpu
  + lspic
  + arch

1. **The Process ID (PID) of the init process is:**
   * 100
   * 0
   * 1
   * varies
2. **What directory typically contains log files?**
   * /proc/loc
   * /usr/log
   * /log
   * /var/log
3. **The /var directory has files that change over time.**

**True or False?**

* + True
  + False

1. **Which of the following commands will allow you to view all processes on the system?**

**(choose two)**

* + ps -ef
  + ps aux
  + ps -eLf
  + ps -A
  + ps

1. **Which directory is the root of the filesystem?**
   * /sys
   * /
   * /var
   * /home
   * /root
2. **A service is…**
   * …another name for a computer’s hostname.
   * …a file that contains configuration information.
   * …like an IP address.
   * …a feature provided by one computer to another.
3. **Only servers have hostnames.**

**True or False?**

* + True
  + False

1. **Which of the following are valid IPv4 addresses?**

**(choose two)**

* + 10.33.55.77
  + 192.105.10.10.2
  + 192.105.10.10
  + 192.301.25.25

1. **Which of the following commands will allow you to log into a remote machine?**
   * route
   * ssh
   * dig
   * netstat
2. **Which files contain user account information?**

**(choose two)**

* + /etc/passwd
  + /etc/passwords
  + /etc/shadow
  + /etc/group

1. **Which command will display the UID, GID and groups your current user belongs to?**
   * whoami
   * Who
   * about
   * id
2. **Each user belongs to at least one group.**

**True or False?**

* + True
  + False

1. **Which command will display the users that are currently logged in to the system?**
   * id
   * who
   * about
   * whoami
2. **Which command will display the groups that the root user belongs to?**
   * all
   * all -t
   * group -r
   * id root
   * groups -a
3. **UIDs 1-499 are usually reserved for what kind of users?**
   * Are not used for user accounts, but for group accounts
   * Log-in (human) users
   * Remote log-in accounts
   * System accounts, such as server processes
4. **Which of the following options for the useradd command allows root to specify the UID to be associated with the account?**
   * -u
   * -g
   * -M
   * -G
5. **Which command can be used to determine a user’s most recent log in?**
   * last
   * login
   * history
   * shell
6. **Which of the following files contains encrypted user password information?**
   * /etc/shadow
   * /etc/group
   * /etc/usr
   * /etc/passwd
7. **Which of the following options for the useradd command allows you to use a different primary group then the default?**
   * -G
   * -u
   * -U
   * -g
8. **Which of the following commands can be used to modify a user?**
   * adduser
   * usermod
   * moduser
   * useradd
9. **Which of the following are methods for setting permissions using the chmod command?**

**(choose two)**

* + letter
  + primary
  + symbolic
  + octal

1. **The chown command can be used to change the owner and group of a file.**

**True or False?**

* + True
  + False

1. **The chmod command can be used on a file by:**
   * The file owner and root
   * The file owner
   * Only root
   * A user that belongs to the files current group
2. **The “execute” permission is never set on files by default.**

**True or False?**

* + True
  + False

1. **The “sticky bit” permission…**
   * …changes the group ownership of existing files in a directory.
   * …prevents others from removing files they don’t own from a common directory.
   * …sets the group ownership of any new file created in a directory.
   * …prevents others from overwriting files they don’t own in common directories.
2. **The “setuid” permission…**
   * …prevents the owner of a file from being changed.
   * …reports the output of a script to the owner.
   * …allows a command to be run as the file owner.
   * …allows files in a directory to be manipulated as by the directory owner.
3. **The “setgid” permission…**

**(choose two)**

* + …prevents the group owner of a file from being changed.
  + …allows files created in a directory to be owned by the group that owns the directory.
  + …allows a command to be run as the group owner of the file.
  + …can only be set on files.

1. **Which of the following ls commands, when executed, will only show information about the directory itself?**

**(choose two)**

* + ls -h
  + ld -d
  + ld -a
  + ls -ld

1. **Embedded Systems means:**
   * Companies must share their changes
   * You can view the software’s source code
   * Businesses cannot charge anything for the software, only the hardware
   * Systems designed to do a specific task on hardware optimized for only that purpose
   * Users must support the systems themselves
2. **Linux originally only ran on:**
   * Xerox copy machines
   * Specialized processor chips
   * Intel 386 PCs
   * Raspberry Pi computers
   * Macintosh
3. **Bundling utilities, management tools, and application software with a Linux kernel is called a:**
   * A trademark
   * A distribution of Linux
   * A type of hardware
   * A text editor
4. **A software release cycle describes:**
   * How often security fixes are implemented
   * How often the software’s memory is released back to the operating system
   * How often upgrades come out for software
   * How often the computer must be rebooted
   * How often the computer must be upgraded to support new software
5. **Apple’s OS X is:**

**(choose three)**

* + A fully certified UNIX distribution
  + Tightly integrated with Apple hardware
  + Partially based on code from the FreeBSD project
  + Primarily used to manage network services
  + Derived from Linux
  + Able to natively run Windows binaries

1. **Microsoft Windows:**

**(choose three)**

* + Is generally backwards compatible with previous versions
  + Offers both desktop and server products
  + Has a Linux compatibility mode
  + Has a short maintenance cycle
  + Has a scripting environment called PowerShell
  + Has a new desktop version every year.

1. **An interpreted programming language:**

**(choose two)**

* + Requires a compilation step but no linking step
  + Is converted into machine specific instructions as the program runs
  + Tends to offer more features than compiled languages
  + Requires a linking step but no compilation step
  + Takes fewer resources to run than a compiled language

1. **The two main families of Linux shells are:**

**(choose two)**

* + Bourne Shell
  + Python Shell
  + Korn shell
  + Emacs
  + C Shell

1. **In virtualization, what are the host and guest?**

**(choose two)**

* + The host is the machine that runs the virtual machines
  + The guest is the machine that runs the virtual machines
  + The terms can be used interchangeably
  + A host is a virtual machine
  + A guest is a virtual machine

1. **Cloud computing is:**
   * Requires fewer resources because systems are shared among many users
   * Allows users in different geographical regions to work together in real time
   * All are correct
   * Is made possible by faster internet speeds
   * Is useful for both business and home users
2. **Which of the following are properties of a strong password?**

**(choose three)**

* + Based on easy to remember items like birthdays
  + Long so that it can be reused on multiple sites
  + Includes symbols
  + At least 10 characters long
  + A mix of upper and lower case

1. **A license where you don’t have access to the source code is called:**
   * Sourceless
   * Impaired source
   * Open source
   * Closed source
2. **A copyleft provision in a software license means:**
   * You must provide support for your modifications
   * You may not link against third party closed source software
   * If you redistribute the software, you must distribute the source to any changes you make
   * You must provide free copies of the software if you use it
   * You give up your copyright to the software
3. **The Free Software Foundation believes that:**

**(choose two)**

* + Software should be free to modify
  + People should write software with no expectation of making money
  + Software should not have copyright
  + Software should be free to share
  + No money should ever change hands

1. **What does it mean when a work is placed in the public domain?**
   * The work was done by a government agency
   * You may not use the work for commercial purposes
   * The author has died
   * The author has relinquished the copyright on the work
   * You must redistribute changes to the software
2. **The semicolon (;) can be used to separate multiple commands to be executed in order.**

**True or False?**

* + True
  + False

1. **To be able to output messages to the screen, use the \_\_\_\_\_\_\_ command:**
   * print
   * echo
   * display
   * type
2. **The \_\_\_\_\_\_\_ command will print a list of the commands that you’ve previously executed.**
   * list
   * eval
   * exec
   * history
3. **HOME is an example of \_\_\_\_\_\_\_\_\_.**
   * A path variable
   * A local variable
   * An environment variable
   * An alias
   * An internal command
4. **The directory where additional documentation for software packages most likely can be found is:**
   * /var/share/doc
   * /var/lib/doc
   * /usr/software/doc
   * /usr/share/doc
5. **To start searching a man page, the first key you press is:**
   * /
   * f
   * s
   * !
6. **To get help on using the info command, execute:**

**(choose two)**

* + man info
  + info info
  + help info
  + info -q

1. **The \_\_\_\_\_ command can be used to find any file, not just commands or man pages.**
   * whatis
   * locate
   * whereis
   * apropos
2. **Hidden files are files that begin with what character?**
   * A period (.)
   * An asterisk (\*)
   * A plus (+)
   * A dash (-)
3. **The top-level directory on a Linux system is represented as:**
   * /
   * /home
   * /root
   * C:
4. **The ls command without options or arguments…**
   * …prompts for a directory to list.
   * …lists the contents of the current directory.
   * …lists the contents of a user’s home directory.
   * …generates an error as this command requires arguments.
5. **The command ls -S will sort files:**
   * By size, smallest to largest
   * By modification date, newest to oldest
   * By number of symlinks, largest to smallest
   * By size, largest to smallest
6. **When using the cp command, you must provide both a source and a destination.**

**True or False?**

* + True
  + False

1. **Which option can be used with the rm command to prompt before deleting?**
   * l
   * A
   * -P
   * -i
2. **Which command would list files that do not begin with a “T” or a “W”?**
   * echo /etc/[!TW]\*
   * echo /etc/[\*TW]!
   * echo /etc/!TW
   * echo /etc/\*[TW!]
3. **In general, for which of the following would you want to use lossless compression?**
   * A JPEG image
   * A log file
   * An encrypted email
   * A movie
   * An mp3 audio file
4. **You type gzip myfile.tar. What happens?**

**(choose two)**

* + An error; you forgot to specify the file with -f
  + myfile.tar is unarchived into the current directory
  + myfile.tar is removed
  + An error; you forgot to pass the name of the output file
  + myfile.tar.gz holds a compressed version of myfile.tar

1. **Which command will show what is inside the compressed tarball with a name of foo.tar.gz?**
   * tar –tf foo.tar.gz
   * tar –tzf foo.tar.gz
   * tar –xf foo.tar.gz
   * tar –lf foo.tar.gz
   * tar –tjf foo.tar.gz
2. **By default, the zip command replaces uncompressed files with compressed files.**

**True or False?**

* + True
  + False

1. **Error messages generated by commands are sent where by default?**
   * STDIN
   * Log files
   * STDOUT
   * STDERR
2. **Which of the following commands will display only lines that begin with test?**
   * grep \*test file.txt
   * grep &test file.txt
   * grep $test\* file.txt
   * grep ^test file.txt
3. **Which of the following commands will display lines that contain either start or end?**
   * egrep ‘start|end’ file.txt
   * egrep start end file.txt
   * egrep start&end file.txt
   * egrep (start|end) file.txt
4. **A file begins with #!/bin/csh. This means:**
   * This is a Perl script
   * The operator should not be using /bin/csh
   * C Shell compatibility mode is enabled
   * Running the script will invoke /bin/csh to interpret the rest of the file
   * Nothing, this is a comment
5. **Most of nano’s commands take the form of:**
   * Alt and another character
   * Escape followed by another character
   * The F1 through F12 function keys
   * Mouse clicks
   * Control and another character
6. **The if command looks for what exit code to consider a condition to be true?**
   * 255
   * 0
   * 2
   * 1
   * 10
7. **The number of users logged in is in a variable called USERS. How would you test to see if 5 users are logged in?**
   * test $USERS –eq 5
   * test $USERS,5
   * test –f USERS=5
   * test $USERS = 5
   * test $USERS –a 5
8. **Which of the following are valid partitioning types?**

**(choose two)**

* + PC
  + MBR
  + GPT
  + BIOS

1. **Software that allows hardware devices to communicate with the installed operating system is called?**
   * Drivers
   * Instructions
   * Packages
   * Programs
2. **Which of the following commands will check hard disk GPT partitions?**

**(choose three)**

* + sfdisk
  + sgdisk
  + gdisk
  + cgdisk
  + gfdisk

1. **The process (ps) command shows only processes running in the current shell by default.**

**True or False?**

* + True
  + False

1. **The free command outputs statistics about:**
   * Memory usage
   * Disk usage
   * Software usage
   * CPU usage
2. **Which file contains the information passed to the kernel at boot time?**
   * /proc/kernel
   * /proc/kopts
   * /proc/kargs
   * /proc/cmdline
3. **To make changes permanent for kernel parameter files found under /proc/sys, the following file can have entries added to it:**
   * /etc/sysinfo.conf
   * /etc/sysctl.conf
   * /etc/procctl.conf
   * /etc/procsys.conf
4. **Which of the following commands will display the IP address on a Linux system?**
   * ifconfig
   * route
   * ipconfig
   * dig
5. **The RSA key fingerprint allows the dig command to connect to remote systems.**

**True or False?**

* + True
  + False

1. **When issuing the service network restart command, which of the following occurs?**
   * …takes down all network interfaces, re-reads all related configuration files and then the networking for the system is restarted.
   * …the networking for the system is stopped and then started back up.
   * …brings up all network interfaces, re-reads all related configuration files and then the networking for the system is restarted.
2. **Which of the following commands can be used to display socket statistics, and supports all major packet and socket types?**
   * route
   * ss
   * ifconfig
   * top
3. **Which of the following commands will display the groups that the user bob belongs to?**
   * group bob
   * id bob
   * all bob
   * groups -a
4. **Traditional UNIX systems allowed users to belong to how many groups?**
   * 65,000
   * 10,000
   * 1
   * 256
   * 16
5. **A value of 0 in the “minimum” password aging field means the user *cannot* change their password.**

**True or False?**

* + True
  + False

1. **Sudo privileges allow users to execute commands as another user.**

**True or False?**

* + True
  + False

1. **The first line of this command displays how long the system has been running since being rebooted.**
   * id
   * getent
   * who
   * w
   * su
2. **Which option for the usermod command can be used to specify a user’s group ID (either primary or secondary)?**

**(choose two)**

* + -g
  + -S
  + -s
  + -G

1. **The groupmod command can be used to add users to a group.**

**True or False?**

* + True
  + False

1. **Which of the following files contains user IDs?**
   * /etc/passwd
   * /etc/shadow
   * /etc/group
   * /etc/usr
2. **Which of the following commands, run as root, will prevent the user bob from logging in?**
   * usermod -L bob
   * usermod -D bob
   * usermod -d bob
   * usermod -l bob
3. **What directory contains a user’s home directory?**
   * /rootfs
   * /user
   * /
   * /home
4. **GIDs under 500 (or 1000) are usually reserved for what kind of groups?**
   * Are not used for groups, but for user accounts
   * Administrators
   * User private groups (UPG)
   * System use
5. **A user cannot delete a file if they do not own it.**

**True or False?**

* + True
  + False

1. **The chown command permits changing group ownership done by root only.**

**True or False?**

* + True
  + False

1. **Which of the following commands will list hidden files as well as their ownership?**
   * ls -a
   * ls -z
   * ls -l
   * ls -la
2. **Which of the following commands will set setuid for /usr/bin/program?**
   * chmod 1755 /usr/bin/program
   * chmod 4755 /usr/bin/program
   * chmod 2755 /usr/bin/program
   * None of the above
3. **Setting setgid on a directory…**
   * …will allow scripts in the directory to be executed as the group owner of the directory.
   * …will set the group owner of all files created in the directory to the group owner of the directory.
   * …is not allowed by the system.
   * …does nothing.
4. **Deleting a source file will break an associated hard link.**

**True or False?**

* + True
  + False

1. **Which of the following commands would create a hard link, *link* to *file*?**
   * ln file link
   * ln -s link file
   * ln link file
2. **Question ID 1158**

**A normal (non root) user has which type of access to the /etc/passwd file?**

* + Read only
  + Execute, read, and write
  + Read and write
  + Write only

1. **Question ID 1159**

**The /etc/passwd file can be modified by which of the following?**

* + Remote user
  + Group account
  + Any user
  + Root user

1. **Question ID 1160**

**A normal user, joe has the following record in the /etc/passwd file. What does the x indicate?**

**joe:x:1021:1020:purchase\_dept\_user:/home/usr/joe:/bin/bash**

* + Password for user joe is locked
  + Password for user joe is x
  + joe has not yet set his password
  + The encrypted password has been stored in the /etc/shadow file

1. **Question ID 1161**

**Refer to following record in the passwd file:**

**test\_user:x:521:520:hr\_dept\_user:/home/usr/test\_user:/bin/bash**

**UID and GID for test\_user are, respectively:**

* + 520 and 521
  + 21 and 20
  + 521 and 520
  + 521 and 1041

1. **Question ID 1162**

**Which of the following info about users is not present in passwd file record?**

* + The user’s shell
  + The user’s account name
  + The user’s home directory
  + The user’s password

1. **Question ID 1164**

**Regular users can modify their GECOS information using which of the following commands?**

* + set
  + finger
  + chfn
  + passwd

1. **Question ID 1165**

**Which of the following commands CANNOT be used to update user information in the /etc/passwd file?**

* + chfn
  + finger
  + useradd
  + usermod

1. **Question ID 1166**

**The root user can convert the password of any user into readable text form.**

**True or False?**

* + True
  + False

1. **Question ID 1167**

**Which of the following information is not stored in the /etc/shadow file?**

* + Default home directory
  + Encrypted password
  + Days since last password change
  + Maximum number of days remaining for the password to expire

1. **Question ID 1168**

**A regular user wants a password that never expires. The Maximum field value in the /etc/shadow file should be set to:**

* + No value
  + \*
  + 99999
  + 1

1. **Question ID 1169**

**The system administrator wants to create a temporary user account to be used for only five days. Immediately after five days, the account should become unavailable for login. The following values should be set for the temporary user in the shadow file:**

* + Maximum=5
  + Warn=5
  + Minimum=5
  + Expire date=today+5

1. **Question ID 1171**

**In the /etc/shadow file, a user record has !! as the first two characters in the encrypted password field. What does this signify?**

* + The password has !! as the first two characters
  + The password is about to expire
  + The account is locked
  + No significance, it is encrypted text

1. **Question ID 1173**

**The system administrator wants to make the password empty for user Don. He should execute the passwd command with which of the following options?**

* + –a Don
  + –d Don
  + –l Don
  + –u Don

1. **Question ID 1175**

**A Linux administrator modifies the values of UID\_MAX and UID\_MIN parameters in the /etc/login.defs file. This in effect will allow her to:**

* + Assign UID and GID within the specified range for all users
  + Assign GID within the specified range for new users
  + Change password expiration policy for existing users
  + Assign UID within the specified range for new users

1. **Question ID 1176**

**The research team for ABC Corp is being increased from one to five members. What is the best way to add new team members to the server?**

* + Create a group named research , with each member given an account belonging to the group.
  + Create a new login account named research that all new members share
  + Create individual users and assign them root privileges
  + Add new users with blank passwords

1. **Question ID 1177**

**A user is a member of three different secondary groups. Which file will contain information regarding his membership in these secondary groups?**

* + /etc/login.defs
  + /etc/passwd
  + /etc/shadow
  + /etc/group

1. **Question ID 1179**

**The groups command displays your current primary group as the first group while the getent command will always display the default primary group.**

True or False?

* + True
  + False

1. **Question ID 1180**

**An account on a Linux system has a UID of 50. Which type of account is this?**

* + Temporary account
  + System account
  + Regular user account
  + Group account

1. **Question ID 1181**

**Which option, when used with useradd command, will display the default options that are used when creating a new user?**

* + –f
  + –D
  + –e
  + –m

1. **Question ID 1182**

**A new user was created using the command useradd steve. The command grep steve/etc/shadow will show the password field for this account as:**

* + Null
  + Blank
  + x
  + !!

1. **Question ID 1183**

**Running the command useradd benon a system with User Private Groups will create:**

* + A user ben and a group ben both are created
  + Only a new user ben is created
  + A user ben and login directory is created
  + Only a group ben is created

1. **Question ID 1185**

**Changes in the /etc/skel directory will apply to:**

* + All existing users
  + None – the /etc/skel directory has no effect on user accounts
  + New users having their home directory in /etc/
  + New users created using useradd command

1. **Question ID 1187**

**The command passwd –S test\_user produces the following output:**

**test\_user NP 03/28/2014 0 99999 7 -1**

**What information does this convey regarding the password status of the test\_user account?**

* + There is no password
  + Locked password
  + New password stored in /etc/shadow
  + Set but non-printable password

1. **Question ID 1188**

**Using the command passwd –e test\_user, the root user can force a password change in the next login attempt.**

**True or False?**

* + True
  + False

1. **Question ID 1189**

**The command chage CANNOT be used to:**

* + Delete a user
  + Update information related to password expiry
  + View password aging policies
  + Enforce a password changing and expiry policy for specific user accounts

1. **Question ID 1190**

**Which of the following commands will set the grace login period of 10 days after the password has expired?**

* + chage –m 5 temp\_user
  + chage –I 10 temp\_user
  + chage –E “2014-06-01” temp\_user
  + chage –W 10 temp\_user

1. **Question ID 1192**

**User lori reported that her account is locked. Which of the following commands will unlock her account?**

* + usermod –L lori
  + usermod lori –e 2014-04-30
  + usermod –U lori
  + usermod lori –g sales

1. **Question ID 1193**

**The system administrator wants to delete the user account joe. However, joe is already logged in to the system. Which of the following commands will allow the administrator to delete joe?**

* + userdel –r joe\_user
  + usermod –d –f joe\_user
  + userdel joe\_user
  + userdel –f joe\_user

1. **Question ID 1194**

**Which of the following commands will allow the root user to create a new group for the sales department and assign this new group the GID of 1250?**

* + Specific GID cannot be assigned
  + groupadd sales\_group 1250
  + groupadd sales\_group –g 1250
  + groupadd sales\_group –n 1250

1. **Question ID 1196**

**The system administrator notices that a file shows a numeric group id 1508. What does this signify?**

* + Group name corresponding to GID 1508 is deleted
  + The file belongs to a system group id
  + Group name is 1508
  + The system has been hacked

1. **Question ID 1258**

**The system clock calculates time as number of seconds elapsed since:**

* + 01-Jan-2000 00:00:00
  + 01-Jan-1980 00:00:00
  + The base time set at the time of installation
  + 01-Jan-1970 00:00:00

1. **Question ID 1259**

**The reference time that the system time is calculated from is known as:**

* + UTC
  + Epoch time
  + GMT
  + Base time

1. **Question ID 1260**

**The system clock contains both time and time zone information.**

**True or False?**

* + True
  + False

1. **Question ID 1261**

**The battery-powered clock, which keeps time when the system is shut down, is known as the:**

* + System clock
  + Battery time
  + Hardware clock
  + Base clock

1. **Question ID 1262**

**When the system boots, the system clock is set using the value of the hardware clock.**

**True or False?**

* + True
  + False

1. **Question ID 1263**

**When the Linux computer was shut down, the system clock indicated 11:30:17. What will be the time of the hardware clock immediately after shutdown?**

* + Varies from time zone to time zone
  + 11:30:17
  + Hardware clock will show UTC time
  + Local time

1. **Question ID 1265**

**A software application that is dependent on both hardware and system clocks is failing. A possible reason could be:**

* + Software license has expired
  + System clock and hardware clocks are out of sync
  + Time zone has changed
  + There are multiple rtc files under /dev

1. **Question ID 1266**

**Which of the following commands will set the system time to the same time as the hardware clock?**

* + hwclock –s
  + hwclock –set –date “current system time”
  + hwclock –w
  + hwclock –r

1. **Question ID 1268**

**Amount of time the hardware clock gains or loses on a regular rate is known as:**

* + Clock cycle change
  + Delta time
  + Clock gain
  + Clock drift

1. **Question ID 1269**

**In the last six months, the administrator had to adjust the hardware clock on three different occasions. He can find information regarding past clock values from which file?**

* + /etc/adjtime
  + /dev/rtc0
  + /dev/rtc1
  + /etc/localtime

1. **Question ID 1270**

**The date command is used for:**

* + Setting the system date and time
  + Assigning filenames with timestamps suffixed to them in scripts
  + Viewing current date and time
  + All choices are valid

1. **Question ID 1271**

**The date command can show the time only in 0-23 hour format.**

**True or False?**

* + True
  + False

1. **Question ID 1274**

**NTP stands for:**

* + Network Time Protocol
  + New Time Protocol
  + No Testing Parameter
  + New Time zone Parser

1. **Question ID 1275**

**The reference time used by NTP is:**

* + UTC
  + Local time on the primary server
  + GMT + 0.5
  + CMOS clock time

1. **Question ID 1276**

**The precision provided by NTP is on the order of:**

* + Tens of million seconds
  + 1 hour
  + 1 second
  + 1 millisecond

1. **Question ID 1277**

**Instead of running ntpd as a daemon, the administrator wants to run it as a background process. Which of the following options should be used?**

* + –c
  + –q
  + –n
  + –g

1. **Question ID 1278**

**The /etc/ntp.conf file shows that NTP servers are being queried using iburst mode. This enables:**

* + Sending a burst of three requests instead of one if the server is unreachable
  + Checking the closest server first
  + Speeding up of initial synchronization
  + Finding time even if the server is unreachable

1. **Question ID 1279**

**Which of the following options, when used with the ntpd command, will perform a one time synchronization:**

* + –g
  + –c
  + –N
  + –q

1. **Question ID 1281**

**The /etc/ntp.conf file lists three servers for querying. Two of them return the time 10:54:23 while the third one shows a different time (i.e. 10:50:37). The system will use which of the return values?**

* + It will use the time of the server that was queried first
  + It will use 10:54:23 since this is what the majority of servers indicate
  + It will use 10:50:37 if this is closer to the system’s current time
  + It will use an average of the time

1. **Question ID 1283**

**Two NTP servers are used by ntpd; one runs Stratum-2 clock while the other uses Stratum-4. Which one is considered to be more accurate?**

* + Stratum-4
  + It is impossible to tell by the Stratum number
  + Stratum-2
  + Both are equally accurate

1. **Question ID 1285**

**To verify if a NTP server is available, which of the following commands should be executed?**

* + ntpdate –q
  + ntpdate
  + ntpdate –t
  + ntpdate –p

1. **Question ID 366**

**Which command will send text to the terminal display:**

* + echo
  + type
  + print
  + show

1. **Question ID 367**

**To replace the currently running shell, you can use:**

* + dash
  + bash
  + exec
  + csh

1. **Question ID 368**

**To display your current location within the filesystem, you can type:**

* + whereami
  + cwd
  + dir
  + pwd

1. **Question ID 369**

**The \_\_\_\_\_ command displays information about the Linux kernel:**

* + kern
  + uname
  + real
  + linux

1. **Question ID 371**

**The basic form of a command line is:**

* + command [options…] [arguments…]
  + command [arguments…] options
  + command arguments options
  + command [options…] arguments…

1. **Question ID 372**

**Bash is:**

* + a website
  + a networking term
  + a shell
  + an operating system

1. **Question ID 374**

**The two login types are:**

* + URI and CLU
  + CLI and GUI
  + URI and CLI
  + GUX and CLI

1. **Question ID 375**

**The core software component that tells the hardware what actions to take is called the \_\_\_\_\_\_\_\_.**

* + compiler
  + kernel
  + transmitter

1. **Question ID 376**

**A command can be:**

**(choose three)**

* + An alias
  + A block
  + A configuration file
  + A variable
  + A function
  + A program built-in to the shell

1. **Question ID 377**

**Which of the following are valid command lines?**

**(choose two)**

* + ls /etc -l
  + ls -l /etc
  + ls -/etc
  + -l ls /etc

1. **Question ID 378**

**You want to execute the ls command with two options: -r and -l. Which of the following are valid ways to run this command:**

**(choose three)**

* + rl ls
  + ls -r -l
  + ls -l -r
  + ls –r –l
  + ls rl
  + ls -rl

1. **Question ID 380**

**You can pass arguments to long options by using which of the following techniques:**

**(choose two)**

* + –option{argument}
  + –option~argument
  + –option=argument
  + –option argument

1. **Question ID 385**

**When typing a command, you can have the bash shell complete the command by pressing which key?**

* + The Up Arrow key
  + The Del key
  + The Backspace key
  + The Tab key
  + The Enter key

1. **Question ID 868**

**The location of users’ default shells is stored in the \_\_\_\_\_\_ file.**

* + /etc/passwd
  + /etc/group
  + /etc/gshadow
  + /etc/shadow

1. **Question ID 869**

**Long command options are preceded by which two characters?**

* + &&
  + —
  + ||
  + \*\*

1. **Question ID 870**

**Which two characters do you use to tell the command that you are finished providing options and that the remaining data on the command line is arguments?**

* + —
  + \*\*
  + ||
  + &&

1. **Question ID 871**

**The \_\_\_\_\_ command will take another command for the argument to execute.**

* + exit
  + uname
  + exec
  + pwd

1. **Question ID 872**

**The \_\_\_\_\_ option to the uname command will display the kernel name.**

* + -s
  + -x
  + -k
  + -n

1. **Question ID 873**

**The \_\_\_\_\_\_ command will display your current working directory.**

* + uname
  + exec
  + pwd
  + exit

1. **Question ID 584**

**To move forward one word at a time in the vi command mode, you press:**

* + f
  + t
  + g
  + w

1. **Question ID 585**

**To go to the beginning of a line in the vi command mode, you press:**

* + g
  + $
  + ^
  + 1

1. **Question ID 586**

**To go to the first line of a vi document in command mode, you can type:**

**(choose two)**

* + G
  + GG
  + 1G
  + gg

1. **Question ID 587**

**To navigate to the end of the line in vi command mode, you can press:**

* + #
  + ^
  + $
  + \*

1. **Question ID 588**

**To move backward through a vi document, word by word, you press:**

* + w
  + b
  + r
  + c

1. **Question ID 589**

**What would typing “4dh” do in vi command mode?**

* + Duplicate the next four characters
  + Delete the previous four characters
  + Delete the next four lines
  + Delete the next four characters

1. **Question ID 590**

**Typing which of the following from vi command mode will attempt to save your file?**

* + :w
  + :s
  + :f
  + :r

1. **Question ID 591**

**If you want to quit the vi program without saving any of the changes you made to your file, you can type in command mode:**

* + :a
  + :Q
  + :s
  + :q!

1. **Question ID 592**

**To save and then quit, you can type in command mode:**

* + :wq
  + :q
  + :qw
  + :WQ

1. **Question ID 593**

**To search forward from your cursor in your vi document in command mode, you can type \_\_ followed by the pattern to search for.**

* + /
  + |
  + ?

1. **Question ID 594**

**To search backward from your cursor in your vi document in command mode, you can type \_\_ followed by the pattern to search for.**

* + ?
  + /
  + |

1. **Question ID 595**

**To perform cut and paste in a vi document, you actually do:**

* + delete and put
  + yank and put
  + yank and paste
  + delete and yank

1. **Question ID 596**

**If you are in the vi command mode and want to begin inserting text before your cursor, you can type:**

* + A
  + i
  + o
  + O

1. **Question ID 597**

**If you are in vi command mode and want to begin inserting text at the end of the line, you can type:**

* + o
  + I
  + O
  + A

1. **Question ID 598**

**If you are in the vi command mode and want to add a new line before your cursor, you can type:**

* + i
  + o
  + O
  + a

1. **Question ID 599**

**If you are in vi command mode and want to add a new line after your cursor, you can type:**

* + o
  + O
  + i
  + a

1. **Question ID 600**

**If you want to move a character to the left in vi command mode, you can press the left arrow key or:**

* + l
  + h
  + j
  + k

1. **Question ID 601**

**If you want to move a character to the right in vi command mode, you can press the right arrow key or:**

* + l
  + k
  + j
  + h

1. **Question ID 602**

**If you want to move up a line in vi command mode, you can press the up arrow key or:**

* + j
  + h
  + l
  + k

1. **Question ID 603**

**If you want to move down a line in vi command mode, you can press the down arrow key or:**

* + l
  + j
  + h
  + k

1. Question ID 814  
   The first stage of the boot process is:
   * The kernel phase
   * The firmware (BIOS/UEFI) stage
   * The init phase
   * The Bootloader (LILO/GRUB) stage
2. Question ID 815  
   The second stage of the boot process is:
   * The firmware (BIOS/UEFI) stage
   * The kernel phase
   * The init phase
   * The Bootloader (LILO/GRUB) stage

1. Question ID 816  
   The third stage of the boot process is:
   * The Bootloader (LILO/GRUB) stage
   * The init phase
   * The firmware (BIOS/UEFI) stage
   * The kernel phase
2. Question ID 817  
   The fourth stage of the boot process is:
   * The Bootloader (LILO/GRUB) stage
   * The kernel
   * The firmware (BIOS/UEFI) stage
   * The init phase
3. Question ID 818  
   The bootloader (GRUB/LILO) loads which of the following components into memory?  
   (choose two)
   * The ramdisk
   * The root filesystem
   * The kernel
   * The init process

1. Question ID 1004  
   The first process that the kernel launches is called the \_\_\_\_\_ process.
   * kernel
   * startx
   * sys
   * init
2. Question ID 1005  
   The program that first starts the boot process is called the \_\_\_\_\_.
   * start
   * bootloader
   * exec
   * boot
3. Question ID 1029  
   Which file is overwritten at the end of each boot process with the messages that were generated while booting?
   * /var/log/dmsg
   * /var/log/dmesg
   * /var/tmp/dmesg
   * /var/msg/dmesg

1. Question ID 1030  
   Which of the following is not a function of the dmesg command?
   * Check how the kernel has dealt with a new device
   * Alter the level of messages that the kernel prints to the console
   * Add a new network interface
   * View the messages generated by the kernel during boot time
2. Question ID 1031  
   Which of the following is not a daemon used for logging?
   * ilogd
   * klogd
   * syslogd
   * rsyslogd
3. Question ID 1032  
   Which directory is used primarily for storing log messages?
   * /var/logging
   * /var/tmp
   * /var/log
   * /var/spool
4. Question ID 786  
   Which of the following are valid Linux bootloaders?  
   (choose two)
   * GRUB
   * BIOS
   * LILO
   * UEFI
5. Question ID 789  
   A primary function of a Linux bootloader is:
   * To load the init process
   * To configure devices
   * To configure memory
   * To load the kernel

1. Question ID 790  
   Which bootloader includes the Secure Boot feature?
   * BIOS
   * UEFI
   * LILO
   * GRUB
2. Question ID 792  
   Which command needs to be executed after modifying the LILO configuration file?
   * lilo
   * redo
   * reload
   * modconfig
3. Question ID 793  
   What version of GRUB is the most modern version?
   * GRUB 3
   * GRUB Original
   * GRUB 2
   * GRUB Legacy

1. Question ID 794  
   For GRUB Legacy, which of the following is used to specify the second partition of the second hard drive?
   * (hd2,2)
   * (hd1,2)
   * (hd2,1)
   * (hd1,1)
2. Question ID 796  
   In GRUB Legacy, which directive is not typically used after a title directive?  
   (choose one)
   * boot
   * initrd
   * kernel
   * root
3. Question ID 800  
   In GRUB Legacy, the \_\_\_\_\_ directive indicates how long to wait before automatically booting the default operating system.
   * timeout=
   * fallback=
   * kernel
   * password=
4. Question ID 801  
   In GRUB Legacy, the \_\_\_\_\_ directive indicates an operating system to boot if the default operating system fails to boot.
   * root
   * redo
   * timeout=
   * fallback=

1. Question ID 802  
   In GRUB Legacy, the password directive in the global setting means:
   * The user must submit the specified password before appending, editing or using the GRUB command line.
   * The user must submit the password before GRUB will attempt to boot the title.
   * You can’t place a password directive in the global setting.
2. Question ID 803  
   In GRUB Legacy, the password directive in the title directive setting means:
   * To boot a specific operating system, a password must be entered
   * The password must be entered to display a menu of operating systems that are bootable
   * You can’t place a password directive in the title directive setting
   * To edit any GRUB values, a password must first be entered
3. Question ID 805  
   Which of the following commands can be used to create an encrypted password that can be used with the password directive in GRUB Legacy:
   * crypt-md5-grub
   * crypt-grub
   * grub-crypt
   * grub-md5-crypt
4. Question ID 807  
   Which of the following is not an advantage of GRUB 2 over GRUB Legacy?
   * Command-line interface
   * Ability to work with architectures that don’t have a PC BIOS
   * Non-ASCII character support
   * Ability to boot from partitions inside of Logical Volume Management (LVM) or RAID devices
   * Dynamically loaded modules

1. Question ID 810  
   The primary GRUB 2 configuration is overwritten when the \_\_\_\_\_ command is executed on Fedora systems.
   * update-grub
   * nano
   * lilo
   * grub2-mkconfig
2. Question ID 811  
   The primary GRUB 2 configuration is overwritten when the \_\_\_\_\_ command is executed on Ubuntu systems.
   * redo
   * update-grub
   * grub2-mkconfig
   * silo
3. Question ID 813  
   The GRUB2 setting that sets the default operating system to boot is called \_\_\_\_\_.
   * GRUB\_BOOT\_DEFAULT
   * GRUB\_DEFAULT
   * GRUB\_TIMEOUT
   * GRUB\_DISTRIBUTOR
4. Question ID 986  
   What is the real location of the GRUB Legacy configuration file?
   * /var/local/grub.conf
   * /boot/grub.conf
   * /etc/grub/grub.conf
   * /boot/grub/grub.conf
5. Question ID 987  
   What is the full path to the LILO configuration file?
   * /etc/lilo.conf
   * /boot/lilo.conf
   * /etc/lilo
   * /var/lilo
6. Question ID 988  
   To use an encrypted password in the GRUB Legacy configuration file, use the \_\_\_\_\_ option to the password directive.
   * –crypt
   * –md5
   * –encrypt
   * –secure
7. Question ID 989  
   To specify a runlevel to boot at, add the run level to the end of the \_\_\_\_\_ directive line.
   * kernel
   * system
   * title
   * boot
8. Question ID 990  
   The primary configuration file for the GRUB 2 on a Fedora system is \_\_\_\_\_.
   * /boot/grub/grub2.cfg
   * /boot/grub2.cfg
   * /boot/grub/grub.cfg
   * /boot/grub2/grub.cfg
9. Question ID 991  
   The primary configuration file for GRUB 2 on an Ubuntu system is \_\_\_\_\_.
   * /boot/grub2/grub.cfg
   * /boot/grub/grub2.cfg
   * /boot/grub/grub.cfg
   * /boot/grub2.cfg
10. Question ID 992  
    The firmware bootloader for Sparc systems is called \_\_\_\_\_.
    * BIOS
    * LILO
    * SILO
    * BOOT
11. Question ID 993  
    The firmware bootloader for PowerPC systems is called \_\_\_\_\_.
    * SILO
    * YABOOT
    * BIOS
    * LILO
12. Question ID 994  
    Instead of modifying the primary configuration file for GRUB2, you should edit the \_\_\_\_\_ file.
    * /etc/grub
    * /etc/grub-default
    * /etc/default/grub
    * /etc/grub-config-all
13. Question ID 995  
    In GRUB Legacy, the \_\_\_\_\_ directive prevents GRUB from displaying all but the default bootable title until the user presses a key.
    * securemenu
    * title
    * titleonly
    * hiddenmenu
14. Question ID 996  
    In GRUB Legacy, the \_\_\_\_\_ directive defines the default operating system to boot.
    * system=
    * boot=
    * default=
    * grub=
15. Question ID 997  
    In GRUB Legacy, the \_\_\_\_\_ directive defines an operating system to boot.
    * boot
    * os
    * title
    * system

## Introduction to Linux I Chapter 18 Exam Answer

### Question ID 820

### Which of the following are considered replacements for the traditional init process?

### (choose two)

* + Sysinit
  + Upstart
  + Starter
  + Systemd

### Question ID 825

### Which runlevel number defines multi-user with no networking services?

* + 2
  + 0
  + 5
  + 1
  + 6
  + 4
  + 3

### Question ID 827

### Instead of using traditional runlevels, Systemd uses:

* + Targets
  + Variables
  + States
  + Functions

### Question ID 832

### Which of the following commands will allow you to change the system runlevel, on a system with traditional init?

### (choose two)

* + telinit
  + systemctl
  + init
  + chginit

### Question ID 833

### Which of the following commands will allow you to change the system to another runlevel, on a system with Systemd?

### (choose two)

* + telinit
  + systemctl
  + chginit
  + init

### Question ID 834

### Which of the following commands can be used to reboot the system?

### (choose two)

* + shutdown -r
  + shutdown
  + halt
  + reboot

### Question ID 835

### Which of the following commands can be used to halt the system?

### (choose two)

* + shutdown
  + reboot
  + halt
  + poweroff

### Question ID 998

### Which runlevel number is defined as “user-definable”?

* + 3
  + 6
  + 0
  + 2
  + 5
  + 1
  + 4

### Question ID 999

### Which runlevel number defines rebooting the system?

* + 1
  + 2
  + 3
  + 6
  + 4
  + 0
  + 5

### Question ID 1000

### Which runlevel number defines multi-user with networking services and no GUI?

* + 4
  + 3
  + 6
  + 2
  + 1
  + 0
  + 5

### Question ID 1001

### Which runlevel number defines multi-user with GUI?

* + 1
  + 6
  + 4
  + 0
  + 2
  + 3
  + 5

### Question ID 1002

### Which runlevel number defines halting the system?

* + 0
  + 3
  + 2
  + 6
  + 4
  + 5
  + 1

### Question ID 1003

### Which command will display both the current runlevel and the previous runlevel?

* + run
  + level
  + rl
  + runlevel

### Question ID 1006

### On a Ubuntu system, what variable defines the default runlevel in the /etc/init/rc-sysinit.conf file?

* + RUNLEVEL
  + DEFAULT
  + DEFAULT\_RUNLEVEL
  + RUN

### Question ID 1007

### For traditional init, the \_\_\_\_\_ file is where the initial default runlevel is defined.

* + /etc/initdefault
  + /etc/init
  + /etc/inittab
  + /etc/sysinit

### Question ID 1008

### What option to the who command will display the current runlevel?

* + -t
  + -r
  + -a
  + -s

### Question ID 1017

### Where are the scripts used to manage the init process located?

* + /etc/rc.init
  + /rc.d/init.d
  + /etc/rc.d/init.d
  + /etc/init/rc.d

### Question ID 1018

### Which of the following can be used to restart the HTTP service?

### (choose two)

* + /etc/init.d/httpd restart
  + service httpd restart
  + service httpd re start
  + service https restart

### Question ID 1019

### The same set of services are started or stopped at different runlevels.

### True or False?

* + True
  + False

### Question ID 1020

### Which directories exist in the /etc/rc.d directory?

* + d. rc0.d, rc1.d, rc2.d, rc3.d, rc4.d, rc5.d and rc6.d
  + c. rc0d, rc1d, rc2d, rc3d, rc4d and rc5d
  + rc0.d, rc2.d, rc4.d, and rc6.d
  + b. rc0, rc1, rc2, rc3, rc4, rc5 and rc6

### Question ID 1021

### Which of the following commands will have the httpd service start at runlevel 5?

* + ln -s /etc/init.d/httpd /etc/rc.d/rc5.d/S85httd
  + cp /etc/init.d/httpd /etc/init.d/rc5.d
  + ln -s /etc/init.d/httpd /etc/rc.d/rc5.d/K85httpd
  + cp /etc/init.d/httpd /etc/rc.d

### Question ID 1022

### Which command is used to view the services that are set to start or stop automatically?

* + lsconfig
  + chkconfig
  + initconfig
  + config

### Question ID 1023

### Which of the following is used to turn off the atd service at runlevels 2 and 4?

* + chkconfig –off 24 atd
  + chkconfig –level 24 atd disable
  + chkconfig –level 24 atd off
  + chkconfig –level 24 atd auto off

### Question ID 1024

### Which is the default runlevel for Debian based Linux systems?

* + 3
  + 5
  + 4
  + 2

### Question ID 1025

### Which of the following is used to define the start of the Apache web server for runlevels 2-4 in the /etc/init.d/apache2.conf file?

* + start on runlevel [2-4]
  + start on run\_level [234]
  + enable runlevel [234]
  + start on runlevel [234]

### Question ID 1026

### Which of the following commands is used as a traditional replacement for the init process?

* + iostat
  + ioctl
  + systemctl
  + sudo

### Question ID 1027

### Which of the following commands is used to view the status of all services?

* + systemctl –a
  + systemctl –l
  + systemctl -l
  + systemctl –all

### Question ID 1028

### Which of the following is not a Linux boot system?

* + bootup
  + systemd
  + upstart
  + init

1. **Question ID 836**

**What two differences are there between querying an installed RPM and an RPM package file with the rpm command?**

**(choose two)**

* + To query the installed RPM, you have to add the -i option.
  + You must use the full filename when querying the installed RPM.
  + You must use the full filename when querying the package.
  + To query the package file, you have to add the -p option.

1. **Question ID 837**

**If you use the -f option when performing an rpm query:**

* + The command will display the full filename of the original package.
  + The command output will wrap at half screen width.
  + The command will show the package that owns a file.
  + The command will output a list of the files in the packages.

1. **Question ID 839**

**If you you have a RPM package file named, figlet-1.1-0.3.i686.rpm, which rpm commands will install it?**

**(choose two)**

* + rpm -F figlet-1.1-0.3.i686.rpm
  + rpm -U figlet-1.1-0.3.i686.rpm
  + rpm -e figlet-1.1-0.3.i686.rpm
  + rpm -i figlet-1.1-0.3.i686.rpm

1. **Question ID 840**

**The rpm2cpio command can be used to:**

**(choose two)**

* + List the content of a “.rpm” file
  + Create a new “.rpm” file
  + Build a binary “.rpm” file from a source “.src.rpm” file
  + Extract files from a “.rpm” file

1. **Question ID 846**

**What is the primary configuration file for yum?**

* + /etc/yum.conf
  + /etc/yum.d/yum.conf
  + /etc/yum/main.conf
  + /etc/yum/yum.conf

1. **Question ID 847**

**In what directory are yum repository configuration files stored?**

* + /usr/share/yum
  + /etc/yum
  + /etc/yum.repos.d
  + /var/lib/yum

1. **Question ID 850**

**How can you determine the RPM package that owns a file?**

* + yum info
  + yum find
  + yum owns
  + yum provides

1. **Question ID 852**

**What is the main advantage in using yum over rpm?**

* + It can automatically resolve dependency issues between packages
  + It is able to use multiple repositories
  + It is able to install packages from internet addresses
  + It will allow you to override dependencies

1. **Question ID 854**

**How can you remove a package using an rpm command?**

* + rpm -r
  + rpm -d
  + rpm -e
  + rpm -x

1. **Question ID 858**

**Which command will show the dependencies of an RPM package?**

* + yum requires
  + yum provides
  + rpm -qpd
  + rpm -qpR

1. **Question ID 859**

**How is the kernel package special for package management?**

* + New versions should be installed instead of upgraded
  + It cannot be uninstalled
  + It contains the core of the operating system
  + New versions should be upgraded instead of installed

1. **Question ID 861**

**Which command shows the scripts that may be part of a RPM package?**

* + yum info
  + yum scripts
  + rpm -q –scripts
  + rpm -qs

1. **Question ID 864**

**Which command will check the integrity of an RPM file?**

* + rpm -qcp
  + rpm -qKp
  + rpm -qCp
  + rpm -qkp

1. **Question ID 865**

**All RPM package management commands must be run as the root user.**

**True or False?**

* + True
  + False

1. **Question ID 1009**

**What are the correct options for the rpm command to display a list of all installed packages?**

* + -a
  + -qall
  + -b
  + -qa

1. **Question ID 1010**

**Which command will download RPM files from repositories?**

* + yumupdate
  + yumdownloader
  + rpmupdate
  + rpmdownloader