Review Questions - 1

1- Every computer consists of physical components and non-physical components. The non-physical components of a computer that understand how to work with the physical components are referred to as:

1. hardware
2. records
3. software
4. processors

Answer: c

2- The operating system software is necessary for a computer to function. True or False?
Answer: True

3. Linux is a _____ and _____ operating system.

1. production, stable
2. multiuser, multitasking
3. processing, operating
4. large, useful

Answer: b

4. The core component of the Linux operating system is the Linux kernel. If you were a Linux systems administrator for a company, when would you need to upgrade your Linux kernel? (Choose all that apply.)
a. when you need support in Linux for new hardware
b. when you need another user interface
c. when you need to increase the stability of Linux
d. when you need to use kernel modules
Answer: a, c

5. Which of the following kernels are developmental kernels? (Choose all that apply.)
a. 2.3.4
b. 3.5.5
c. 4.1-rc5
d. 4.4.4
Answer: a, c

6. Many types of software are available today. Which type of software does Linux represent?
a. open source software
b. closed source software
c. freeware
d. shareware
Answer: a

7. Which of the following are characteristics of Open Source Software? (Choose all that apply.)
a. The value of the software is directly related to its price.
b. The software is developed collaboratively.
c. The source code for software is available for a small fee.
d. Any bugs are fixed quickly.
Answer: b, d

8. To which license does Linux adhere?

a. open license
b. artistic license
c. GNU General Public License
d. free source license

Answer: c

9. What are some good reasons for using Linux in a corporate environment? (Choose all that apply.)

a. Linux software is unlikely to become abandoned by its developers.
b. Linux is secure and has a lower total cost of ownership than other operating systems.
c. Linux is widely available for many platforms and supports many programming languages.
d. Most Linux software is closed source.

Answer: a, b, c

10. Which of the following are common methods for gaining support for Linux?

a. HOWTO documents at *www.tldp.org*
b. a local Linux User Group
c. Internet newsgroups
d. all the above

Answer: d

11. Which two people are accredited with creating the UNIX operating system? (Choose two answers.)

a. Dennis Ritchie
b. Richard Stallman
c. Linus Torvalds
d. Ken Thompson

Answer: a, d

12. Who formed the Free Software Foundation to promote open development?

a. Dennis Ritchie
b. Richard Stallman
c. Linus Torvalds
d. Ken Thompson

Answer: b

13. Which culture embraced the term "GNU" (GNU's Not UNIX) and laid the free software groundwork for Linux?

a. the hacker culture
b. the MIT culture
c. the cracker culture
d. the Artificial Intelligence culture

Answer: a

14. Linux was developed by _____ to resemble the _____ operating system.

a. Linus Torvalds, MINIX
b. Linus Torvalds, GNU
c. Richard Stallman, GNU
d. Richard Stallman, MINIX

Answer: a

15. When the core components of the Linux operating system are packaged together with other Open Source Software, it is called a:

a. new kernel
b. new platform
c. Linux distribution
d. GNU Project

Answer: c

16. Which common GUI environments are available in most
Linux distributions? (Choose all that apply.)
a.   GNOME
b.   CDE
c.   KDE
d.   RPM
Answer: a, c

17. Which of the following are factors that determine which Linux
distribution a user will use? (Choose all that apply.)
a.   package manager support
b.   hardware platform
c.   kernel features
d.   language support
Answer: a, b, c

18. What is the most common open source Web server available for
Linux?
a.   Samba
b.   Apache
c.   Squid
d.   OpenStack
Answer: b

19. Which of the following can be used on Linux to provide file and
print services?
a.   Samba
b.   Apache
c.   Squid
d.   OpenStack
Answer: a

20. Which of the following Linux distributions is likely to be used by
a CyberSecurity worker†
a.   Fedora
b.   Ubuntu
c.   Kali
d.   Gentoo
Answer: c

Review Questions - 2

420-SE2-AS gr. 07112
C2 Operating systems A21
Publië par Amirhossein Ghasemi le 28 nov 2024

1- What is the default shell in Linux called?

1. SH
2. BSH
3. CSH
4. BASH

Answer: d

2- What equivalent to the man command generally provides an easier-to-read description of the queried command and contains links to other related information?

1. who
2. man help
3. man -descriptive
4. info

Answer: d

3- What command can you use to safely shut down the Linux system immediately?

1. shutdown -c
2. shutdown -r
3. down
4. hait

Answer: d

4- What command is equivalent to the man —k *keyword* command?

1. find *keyword*
2. man *keyword*
3. apropos *keyword*
4. appaloosa *keyword*

Answer: c

5- Which of the following is *not* a piece of information that the Fedora installation program prompts you for?

1. time zone
2. installation destination
3. firewall settings
4. installation language

Answer: c

6- Linux commands entered via the command line are not case sensitive. True or False?
Answer: False

7- Which command blanks the terminal screen, erasing previously displayed output?

1. erase
2. clean
3. blank
4. clear

Answer: d

8- When sitting at a computer running Linux, what key combination do you press to open the graphical terminal?

1. Ctrl+Alt+G
2. Ctrl+Alt+F4
3. Ctrl+Alt+F1
4. Ctrl+7

Answer: c

9- To install Linux within a virtual machine, you can specify the path to an ISO image that contains the Linux installation media within virtualization software without having to first write the ISO image to a DVD or USB flash drive. True or False?
Answer: True

10- After you log in to a terminal, you receive a user interface called a _____.
a.   GUID
b.   shell
c.   text box
d.   command screen
Answer: b

11- Users enter commands directly to the kernel of the Linux operating system. True or False?
Answer: False

12- How can you protect a metacharacter (such as the $ character) from shell interpretation?

1. Precede it with a /.
2. Follow it with a \.
3. Precede it with a $.
4. It cannot be done as metacharacters are essential.
5. Precede it with a \.

Answer: e

13- You know a Linux command will perform a desired function for you, but you cannot remember the full name of the command. You do remember it will flush a variable from your system. Which command typed at a command prompt displays a list of commands that would likely contain the command you desire?
a.   man —k flush
b.   man —k find all
c.   man flush
d.   man —key flush
Answer: a

14- Which command displays the users who are currently logged in to the Linux system?

1. finger
2. who
3. id
4. date

Answer: b

15- Which prompt does the root user receive when logged in to the system?

1. $
2. @
3. #
4. !

Answer: c

16- Which prompt do regular users receive when logged in to the system?

1. $
2. @
3. #
4. !

Answer: a

17- Which of the following refers to the third primary partition on the second SAS hard disk within Linux?

1. hdb2
2. sda3
3. hdb3
4. sdb3

Answer: d

18- Which two partitions do you typically create at minimum during a Fedora Linux installation? (Choose two answers.)

1. *I*
2. /boot
3. swap
4. /home

Answer: a, c

19- If you boot your computer from Linux live media, you will be able to use a fully-functional Linux system prior to installing Linux on permanent storage. True or False?

Answer: True

20- Which of the following is *not* an example of virtualization software that can be used to install Linux within another operating system?

1. Oracle VirtualBox
2. Microsoft Hyper-V
3. Spiceworks
4. VMWare

Answer: c

Review Questions - 3

1- A directory is a type of file. True or False?

    Answer: True

2- Which command would a user type on the command line to find out the current directory in the directory tree?

    1. pd
    2. cd
    3. where
    4. pwd

    Answer: d

3- Which of the following is an absolute pathname? (Choose all that apply.)

    1. Home/resume
    2. C:\myfolder\resume
    3. resume
    4. /home/resume
    5. C:home/resume

    Answer: d

4- A special device file is used to _____

    1. enable proprietary custom-built devices to work with Linux
    2. represent hardware devices such as hard disk drives and ports
    3. keep a list of device settings specific to each individual user
    4. do nothing in Linux

    Answer: b

5- If a user's current directory is /home/mary/project1, which command could she use to move to the etc directory directly under the root?

    1. cd ..
    2. cd /home/mary/etc
    3. cd etc
    4. cd /etc
    5. cd \etc

    Answer: d

6- After typing the Is —a command, you notice a file whose filename begins with a dot (.). What does this mean?

    1. lt is a binary file.
    2. lt is a system file.
    3. lt is a file in the current directory.
    4. lt is a hidden file.

    Answer: d

7- After typing the Is —F command, you notice a filename that ends with an * (asterisk) character. What does this mean?

    1. It is a hidden file.
    2. It is a linked file.
    3. It is a special device file.
    4. It is an executable file.

    Answer: d

8- The vi editor can function in which two of the following modes? (Choose both that apply.)

    1. text
    2. command
    3. input
    4. interactive
    5. insert

    Answer: b, e

9- The less command offers less functionality than the more command. True or False?
    Answer: False

10- Which command searches for and displays any text contents of a binary file?

    1. text
    2. strings
    3. od
    4. less

    Answer: b

11- How can a user switch from insert mode to command mode when using the vi editor'?

    1. Press the Ctrl+Alt+Del keys simultaneously.
    2. Press the Del key.
    3. Type a : character.
    4. Press the Esc key.

    Answer: d

12- If "resume" is the name of a file in the home directory off the root of the filesystem and your present working directory is home, what is the relative name for the file named resume?

    1. /home/resume
    2. /resume
    3. resume
    4. \home\resume

    Answer: c

13- What will the following wildcard regular expression return: file[a-c]?

    1. filea-c
    2. filea, filec
    3. filea, fileb, filec
    4. fileabc

    Answer: c

14- What will typing q! at the : prompt in command mode do when using the vi editor'?

    1. quit as no changes were made
    2. quit after saving any changes
    3. nothing because the ! is a metacharacter
    4. quit without saving any changes

    Answer: d

15- A user types the command head /poems/mary. What will be displayed on the terminal screen?

    1. the first line of the file mary
    2. the header for the file mary
    3. the first 20 lines of the file mary
    4. the last 10 lines of the file mary
    5. the first 10 lines of the file mary

    Answer: e

16- The tac command _____

    1. is not a valid Linux command.
    2. displays the contents of hidden files .
    3. displays the contents of a file in reverse order last word on the line first and first word on the line last.
    4. displays the contents of a file in reverse order last line first and first line last.

    Answer: d

17- How can you specify a text pattern that must be at the beginning of a line of text using a regular expression?

    1. Precede the string with a /.
    2. Follow the string with a \.
    3. Precede the string with a $.
    4. Precede the string with a ^.

    Answer: d

18- Linux has only one root directory per directory tree. True or False?
    Answer: True

19- Using wildcard metacharacters, how can you indicate a character that is *not* an a or b or c or d?

    1. [^abcd]
    2. not [a-d]
    3. [!a-d]
    4. !a-d

    Answer: c

20- A user typed in the command pwd and saw the output: /home/jim/sales/pending. How could that user navigate to the /home/jim directory?

    1. cd ..
    2. cd /jim
    3. cd ../..
    4. cd ./.

    Answer: c

Review Questions

1- A symbolic link is also known as a soft link and is depicted by an @ symbol appearing at the beginning of the filename when viewed using the Is —I command. True or False?

Answer: False

2- What was created to define a standard directory structure and common file location for Linux?

1. FSH
2. X.500
3. FHS
4. root directory

Answer: c

3- There is no real difference between the "S" and "s" special permissions when displayed using the Is —I command. One just means it is on a file, and the other that it is on a directory. True or False?

Answer: False

4- The default permissions given by the system prior to analyzing the umask are _____ for directories and _____ for files.

1. *en-cw-cw-* and *ew-cw-cw-*
2. rw-rw-rw- and r--r--r--
3. rw-rw-rw- and rwxrwxrwx
4. rwxrwxrwx and rw-rw-rw-
5. rwxrw-rw- and rwx-rw-rw-

Answer: d

5- What must a user do to run cp or mv interactively and be asked whether to overwrite an existing file?

1. There is no choice as the new file will overwrite the old one by default.
2. Type interactive cp or interactive mv.
3. Type cp -i or mv-i.
4. Type cp —interactive or mv - interactive.
5. Just type cp or mv as they run in interactive mode by default.

Answer: e

6- The root user utilizes the chgrp command to give ownership of a file to another user. What must the root user do to regain ownership of the file?

1. Run chgrp again listing the root user as the new owner.
2. Nothing, because this is a one-way, one-time action.
3. Have the new owner run chgrp, and list the root user as the new owner.
4. Run chown and list the root user as the new owner.

Answer: a

7- After typing the Is -F command, you see the following line in the output:

 -rw-r-xr-- 1 user1 root   0 Apr 29 15:40 file1

What does this mean?

1. User1 has read and write, members of the root group have read and execute, and all others have read permissions to the file.

2. Members of the root group have read and write, user1 has read and execute, and all others have read permissions to the file.

3. AII users have read and write, members of the root group have read and execute, and user1 has read permissions to the file.

4. User1 has read and write, all others have read and execute, and members of the root group have read permissions to the file.

Answer: a

8- After typing the command umask 731, the permissions on all subsequently created files and directories will be effected. In this case, what will be the permissions on all new files?

1. rw-rw-rw-
2. rwxrw-r--
3. ---r--rw-
4 -----wx--x

Answer: c

9- You noticed a file in your home directory that has a + symbol appended to the mode. What does this indicate?

1. Special permissions have been set on the file.
2. The file has one or more files on the filesystem that are hard linked to it.
3. The sticky bit directory permission has been set on the file, and will remain inactive as a result.
4. Additional entries exist within the ACL of the file that can be viewed using the getfacl command.

Answer: d

10- When you change the data in a file that is hard-linked to three others, _____

1. only the data in the file you modified is affected
2. only the data in the file you modified and any hard linked files in the same directory are affected
3. the data in the file you modified and the data in all hard linked files are modified because they have different inodes
4. the data in the file you modified as well as the data in all hard-linked files are modified because they share the same data and all have the same inode and file size

Answer: d

11- The command chmod 317 file1 would produce which of the following lines in the ls command?

1. --w-r--rwx 1 user1 root   0 Apr 29 15:40 fiIe1
2. --wx--xrwx 1 user1 root   0 Apr 29 15:40 fiIe1
3. -rwxrw-r-x 1 user1 root   0 Apr 29 15:40 file1
4. --w-rw-r-e 1 user1 root   0 Apr 29 15:40 file1

Answer: b

12- Which of the following commands will change the user ownership and group ownership of *file1* to user1 and root, respectively?

1. chown user1:root file1
2. chown user1 : root file1
3. This cannot be done because user and group ownership properties of a file must be modified separately.
4. chown root:user1 file1
5. chown root : user1 file1

Answer: a

13- What does the /var directory contain?

1. various additional programs
2. spools and log files
3. temporary files
4. files that are architecture-independent
5. local variance devices

Answer: b

14- What does the mv command do? (Choose all that apply.)

1. It makes a volume.
2. It makes a directory.
3. It moves a directory.
4. It moves a file.

Answer: c, d

15- A file has the following permissions *r------ x-w-*. The command chmod 143 would have the same effect as the command
_____. (Choose all that apply.)

1. chmod u+x-r,g+r-x,o+w file1
2. chmod u=w,g=rw,o=rx file1
3. chmod u-r-w,g+r-w,o+r-x file1
4. chmod u=x,g=r,o=wx file1
5. chmod u+w,g+r-w,o+r-x file1
6. chmod u=rw,g=r,o=r file1

Answer: d

16- The which command _____

1. can only be used to search for executables
2. searches for a file in all directories starting from the root
3. is not a valid Linux command
4. searches for a file only in directories that are in the PATH variable

Answer: d

17- Hard links need to reside on the same filesystem as the target, whereas symbolic links need not be on the same filesystem as the target. True or False?
Answer: True

18- When applied to a directory, the SGID special permission_____

1. causes all new files created in the directory to have the same group membership as the directory and not the entity that created them
2. cannot be used, because it is applied only to files
3. allows users the ability to use more than two groups for files that they create within the directory
4. causes users to have their permissions checked before they are allowed to access files in the directory

Answer: a

19- Which command do you use to rename files and directories?

   1. cp
   2. mv
   3. rn
   4. rename

Answer: b

20- What are the three standard Linux permissions?

   1. full control, read-execute, write
   2. read, write, modify
   3. execute, read, write

   4. read, write, examine

Answer: c

21- Given the following output from the ls command, how many files are linked with fiIe1?

```
drwxr-xr-x   3 root   root       4096 Apr 8 07:12 Desktop
-rw-r--r--   3 root   root        282 Apr 29 22:06 fiIe1
-rw-r--r--   1 root   root        282 Apr 29 22:06 file2
-rw-r--r--   4 root   root        282 Apr 29 22:06 file3
-rw-r--r--   2 root   root        282 Apr 29 22:06 file4
-rw-r--r--   1 root   root        282 Apr 29 22:06 file5
-rw-r--r--   1 user1  sys         282 Apr 29 22:06 file6
```

   1. one
   2. two
   3. three
   4. four

Answer: b

22- Only the root user can modify a file that has the immutable attribute set. True or False?
Answer: False