

Practice Midterm

Fill in the Blank

1. _____ is the name of the person who invented Linux.
2. _____ is the core of the operating system.
3. _____ is the part of the operating system that a user interacts with
4. _____ is the partition on the hard drive where virtual memory is stored
5. _____ is the name of the shell used by default in Linux
6. _____ is the name of the user that has all administration privileges on the machine
7. _____ is a term for software whose code can be read and shared freely to others
8. _____ are files that contain human-readable text rendered by mapping to a character encoding

Multiple Choice

1. The Unix philosophy is:

- (a) Do one thing and do it well
- (b) Operating systems should not be portable
- (c) Code should be compiled and copyrighted
- (d) A good program is monolithic and comprehensive

2. Which of the following is not a reason that Unix was unique for its time:

- (a) it had a small basic foundation called the kernel on top of which the community customized
- (b) it could use multiple different interactive shells
- (c) it could run on any hardware because it was written in the new high-level language C
- (d) it was a monolithic, closed-source, multi-user, time-sharing OS built for mainframes

3. What is the outcome of typing `cd /` into the terminal:

- (a) the present working directory becomes the user's home folder
- (b) the present working directory becomes the root directory (/)
- (c) the present working directory remains the same
- (d) the current user is changed to root

4. What is the outcome of typing `cd ./` into the terminal:

- (a) the present working directory becomes the user's home folder
- (b) the present working directory becomes the root directory (/)
- (c) the present working directory remains the same
- (d) the current user is changed to root

5. What is the outcome of typing `cd /home/username` into the terminal:

- (a) the present working directory becomes the user's home folder
- (b) the present working directory becomes the root directory (/)
- (c) the present working directory remains the same
- (d) the current user is changed to root

6. To save a file in Vi

- (a) Ctrl+x, Ctrl+s
- (b) type set number in ex mode
- (c) enter command mode, then ex mode, and type s and ENTER
- (d) enter command mode, then ex mode, and type w and ENTER

7. To quit in Emacs

- (a) Ctrl+x, Ctrl+c
- (b) enter command mode, then ex mode, and type q and ENTER
- (c) press Ctrl+k once, the universal kill process command
- (d) enter command mode, then ex mode, and type s and ENTER

8. To enter insert mode in Vi

- (a) Press I
- (b) Press i
- (c) Press :
- (d) Press ESC

9. To enter Ex mode in Vi

- (a) Press ESC, then press :
- (b) Press ESC, then press Ctrl+c
- (c) Ctrl+x
- (d) Press V

Name_____

CIS440

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For the following write Linux-based, Unix-based, or Other

1._____ Fedora

2._____ Red Hat Enterprise

3._____ Windows 10

4._____ BSD

5._____ SystemV

6._____ MULTICS

7._____ MacOS

8._____ Android

9._____ Ubuntu

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Write binary or text next to the following file extensions:

1._____ txt

2._____ sh

3._____ bmp

4._____ html

Commands

- | | |
|-----------------|---|
| 1._____ cat | a. change file timestamps / create a blank file |
| 2._____ mv | b. compare two sorted files line by line |
| 3._____ cut | c. concatenate files and print on the standard output |
| 4._____ grep | d. print lines matching a pattern |
| 5._____ touch | e. move (rename) files |
| 6._____ ls | f. display a line of text to stdout |
| 7._____ chmod | g. change file mode bits (permissions) |
| 8._____ wc | h. remove sections from each line of files |
| 9._____ comm | i. change user password |
| 10._____ sudo | j. display one-line manual page descriptions |
| 11._____ passwd | k. execute a command as another user |
| 12._____ whatis | l. list directory contents |
| 13._____ echo | m. print newline, word, and byte counts for each file |

Directories

- | | |
|------------------|---|
| 1. ____ . | a. stores files that vary in size |
| 2. ____ .. | b. stores representations of running processes |
| 3. ____ /usr/bin | c. stores representations of physical devices |
| 4. ____ /root | d. the directory where users' personal files are |
| 5. ____ /dev | e. the old place where external storage mounts |
| 6. ____ /proc | f. the root user's home directory |
| 7. ____ /lib | g. the directory where shared program libraries are |
| 8. ____ / | h. the trunk directory that contains all other directories |
| 9. ____ /home | i. a place where programs used by all users can be stored |
| 10. ____ /media | j. a special directory meaning parent directory |
| 11. ____ /mnt | k. a place to store applications for all users to use that are not managed by the package manager |
| 12. ____ /etc | l. the new place where external storage mounts |
| 13. ____ /var | m. stores kernel images |
| 14. ____ /opt | n. a special directory meaning current directory |
| 15. ____ /boot | o. stores configuration files for programs |

What is the output

The following files are contained in the directory /home/profX/midterm/

<u>square.txt:</u>	<u>triangle.txt</u>	<u>species.csv</u>	<u>pop.csv</u>	<u>qwerty.txt</u>
###	*	name, color, kingdom	name, population	q
###	***	monkey, brown, Mammal	monkey, 5000	w
###	*****	yeast, yellow, Fungus	elephant, 300	e
	*****	cactus, green, Plant	cactus, 20	r
<u>smiley.txt</u>	*****	elephant, gray, Mammal		t
:)				y

paste square.txt square.txt

grep < species.csv "Mammal"

sort qwerty.txt

ls /home/profX/midterm | sort | grep txt

cat smiley.txt smiley.txt smiley.txt

paste qwerty.txt qwerty.txt

cut -d"," -f2 pop.csv

echo ":(" > smiley.txt

Complete this task

Get information about how to use the cat command from inside the terminal by accessing this commands documentation:

1. Print the words “Help I’m not a werewolf! Let me in!” to the terminal screen
2. Print the current directory that you are in
3. Print the list of directories in the root directory (/)
4. Combine the contents of the files LotR1.txt, LotR2.txt, and LotR3.txt.
5. Change the permissions of the file sorcerors-apprentice.sh from rwx - - - - - to rwxrwxrwx
6. Move to the parent directory from the current directory you are in
7. Create a file named hello.txt in the directory /home/profX/
8. Initiate the command to change your password.
9. Append the words “Get out” to the file journal.txt
10. Change the owner of the file triforce.sh to zelda
11. Open the file hello-world.txt in emacs