

Midterm Sample Answers

CS140U - Sample midterm Answers

True/False Questions (1 pt each)

1. T/F T The predominant mode of interaction with UNIX is text-based.
2. T/F T Organizing your files is critical to working in UNIX.
3. T/F F You don't really need to know the exact syntax of a UNIX command to use it.
4. T/F T UNIX commands are typed-in in lowercase letters.
5. T/F T An option argument in a UNIX command modifies the behavior of the option.
6. T/F F A command argument in a UNIX command modifies the behavior of the command.
7. T/F T A space character is optional between the option and the option argument.
8. T/F T Some UNIX commands may be typed with nothing following the command name itself.
9. T/F F If a UNIX command executes properly, you are not returned to the shell prompt.
10. T/F T There are some characters that are invalid when used in a UNIX password.
11. T/F T When typing UNIX code or commands, UNIX is case-sensitive.
12. T/F F Logging-off a UNIX system always involves typing exit on the command line.
13. T/F F A LAN connection involves use of the Internet.
14. T/F F The PuTTY program runs on a UNIX machine.
15. T/F F The telnet Client program runs on a UNIX machine.
16. T/F T UNIX does not support file extensions.

17. T/F F UNIX does not support file types.
18. T/F T The echo \$HOME command displays the absolute pathname for your home directory.
19. T/F F The echo \$JOHN command displays the absolute pathname for the home directory of user John.
20. T/F F A UNIX pipe can be used for communication between two processes running on different computers on a local area network.
21. T/F F The /bin directory is the recycle bin for a UNIX system where all of your deleted files and directories go.
22. T/F T The pwd command displays the absolute pathname for your current directory.
23. T/F F The ls -l command displays long listings of all the files in your current directory, including hidden files.
24. T/F T The ls -i ~/courses/cs140u command can be used to display the inode number for ~/courses/cs140u.
25. T/F T The ls -il and ls -li commands display the same output.
26. T/F T In the output of ls -l ~/test1, the first character identifies the type of test1.
27. T/F F The rmdir ~/courses/cs140u command can be used to remove both courses and cs140u directories.
28. T/F F The rmdir -p ~/courses/cs140u command can be used to remove both courses and cs140u directories even if cs140u directory is not empty.
29. T/F T The mkdir -p ~/personal/taxes command can be used to create the personal directory under your home directory and the taxes directory under the personal directory.
30. T/F T The file ~/ * command can be used to display the types of all the files in your home directory.
31. Give three examples of poor password choices. What is wrong with each? Include one that is too short. Give the error message displayed by the passwd utility. (4 pts)

See page 41 for passwd error messages. Examples of poor password choices are

pizza word in the dictionary

tom login name

aqbfgya does not contain a number

5q too short

32. When you start pico and your screen looks strange, what might be wrong?

How can you fix it? (1 pt)

Your TERM shell variable is probably not set or is set to an incorrect value. For more information, refer to “Specifying Your Terminal” on page 1402

33. Four of the following five filenames contain special characters: (8 pts)

"\abc

"abc"

'abc'

ab*c

abc

a. Show how to create files with these names.

```
$ touch "\"\abc "'abc"' \'abc\' ab*c abc
```

```
$ ls
```

```
abc 'abc' "\"abc "abc" ab*c
```

34. How can you keep other users from using write to communicate with you?

Why would you want to? (1 pt)

Give the command `mesg n` to keep other ordinary users from writing to

your terminal. You can take this action when you do not want to be disturbed or are viewing something on your screen that you do not want

overwritten

35. What happens when you give the following commands if the file named `done` already exists? (1pt)

```
$ cp to_do done
```

```
$ mv to_do done
```

Either command overwrites `done` with the contents of `to_do`.

36. How can you find the phone number for Ace Electronics in a file named `phone` that contains a list of names and phone numbers? What command

can you use to display the entire file in alphabetical order? How can you

remove adjacent duplicate lines from the file? (3 pts)

```
$ grep "Ace Electronics" phone
```

```
$ sort phone
```

```
$ uniq phone
```

37. Create a .plan file in your home directory. Does finger on your system display the contents of your .plan file? (1 pt)

The answer is system dependent.

38. What command can you use to look at the first few lines of a file named status.report? What command can you use to look at the end of the file? (2 pts)

```
$ head status.report
```

```
$ tail status.report
```

39. Some mailers, particularly older ones, are not able to handle binary files. Suppose that you are mailing someone a file that has been compressed with gzip, which produces a binary file, and you do not know what mailer the recipient is using. (2 pts)

a. Convert a compressed file to ASCII, using uuencode. Is the encoded file

bigger or smaller than the compressed file? Explain. (2 pts)

The following command converts the file memo.gz to ASCII using uuencode. The .uuencode filename extension is not required.

```
$ uuencode memo.gz > memo.gz.uuencode
```

The resulting ASCII file is larger than the original binary file because uuencode includes control information.

40. List the commands you can use to (2 pts)

a. Make your home directory the working directory

b. Identify the working directory

cd, pwd

41. Suppose that a user belongs to a group that has all permissions on a file named `jobs_list`, but the user, as the owner of the file, has no permissions. Describe what operations, if any, the user can perform on `jobs_list`. What command that the user can give will grant the user all permissions on the file? (1pt)

Initially, the owner/user cannot perform any operations involving the file, other than to use `ls` to list it. When the owner/user gives the following command, the owner/user can perform any operation involving the file:

```
$ chmod 7xx jobs_list
```

The `xx` can be any two digits (0-7).

42. Assume that the following files are in the working directory: (4 pts)

```
$ ls
```

```
intro notesb ref2 section1 section3 section4b notesa ref1 ref3  
section2 section4a sentrev
```

Give commands for each of the following, using wildcards to express filenames with as few characters as possible.

a. List all files that begin with `section`.

```
$ ls section*
```

b. List the section1, section2, and section3 files only.

```
$ ls section[1-3]
```

c. List the intro file only.

```
$ ls i*
```

d. List the section1, section3, ref1, and ref3 files.

```
$ ls *[13]
```

43. Give a command to (2 pts)

a. Redirect the standard output from a sort command into a file named phone_list. Assume that the input file is named numbers.

```
$ sort numbers > phone_list
```

b. Create a file named book that contains the contents of two other files:

part1 and part2.

```
$ cat part[12] > book
```