

UNIX Homework Check Yourself Sheet

UNIX Tutorials

http://rik.smith-unna.com/command_line_bootcamp/?id=aq91zpesfx7

<https://linuxjourney.com/>

<https://linuxsurvival.com>

<https://devhints.io/bash>

Quiz Yourself

If you can answer all these question,

filesystem

1. What does 'ls -ltr' do?
2. When you use cd to navigate, what does each of these identifiers mean:
 - a. -
 - b. ..
 - c. /
 - d. ~
3. How can you create a structure of multiple subdirectories in one line, e.g. dir1/dir2/dir3
4. What is a symbolic link and how do you create it?
5. What does each of these file permissions mean:
 - a. u+x
 - b. o-r
 - c. a+rw
 - d. go-w
 - e. 774

- f. 660
- 6. How do you change file:
 - a. Permissions
 - b. Owner
 - c. Group

String manipulation

- 7. Print all lines in ~/.bash_profile that are not empty and not comments. Find at least 2 ways to do this.
- 8. Print number of empty lines in ~/.bash_profile.
- 9. Switch all appearances of “buffalo” with “badger” in the following string:
An old buffalo watches a young buffalo playing in the grass with another buffalo
- 10. Print the third word in the following string:
no:such:thing:as:too:many:colons
- 11. Write a line that deletes all files and directories under ~/my_dir/ that don't contain the string “boo” in the name.
- 12. How do you perform arithmetic operations in shell (e.g. 5 + 2)? Find 3 ways using different commands.

Environment

- 13. What environment variable holds your previous location? What does PATH hold?
- 14. How do you print all environment variables? How do you create a new one?
- 15. What do the next reserved variables mean:
 - a. \$#
 - b. \$@
 - c. \$?
- 16. How do you run the previous command (without using arrows)? How do you print the number of arguments of the previous command?
- 17. Which command switches between users?

18. How do you know if a remote server is up? (! there is more than one answer)
19. How do you connect to a remote server? How do you copy files between 2 machines?
20. Which command shows monitoring of all processes running?
21. How can you find the process id(s) of *'bash'*?
22. What commands help you find:
 - a. Path of current directory
 - b. Current user name
 - c. Name of the machine
 - d. Current time and date

Important Miscellaneous

23. How do you know what script runs a command? (for example, *'ls'* actually runs *'/bin/ls'*)
24. How do you know what a command does? (there are at least 2 options for native shell commands)
25. Print all aliases in your shell (alias is a shortened version of a command + parameters you frequently use). How do you create a new one? Where are they stored?