

Circle for each part True or False depending whether or not the statement is true or false.

- ___1. { T or F } The first UNIX was created by fellows working for IBM.
- ___2. { T or F } UNIX supports a hierarchical directory structure.
- ___3. { T or F } Our current LINUX system is a multiuser system.
- ___4. { T or F } The command pwd is normally used to change the password.
- ___5. { T or F } The command ls lists the contents of a directory.
- ___6. { T or F } The command cp is used to copy files.
- ___7. { T or F } The data type double stands for double-length integer.
- ___8. { T or F } The data type char holds 1 byte.
- ___9. { T or F } The function sizeof(float) returns the integer 8.
- ___10. { T or F } The range of unsigned short int is 0 to $2^{16} - 1$.

Circle if the statement is True (T) or False (F). Each question is worth 1 point.

Assume initially that `-rwx----- 1 koc staff 12612 Apr 8 11:35 abc`

- ___11. { T or F } After the command `chmod g+x abc`, the file abc executable by all.
- ___12. { T or F } The command `chmod g+x abc` is equivalent to `chmod 710 abc`
- ___13. { T or F } After the command `chmod og+rx abc`, the file abc executable and readable by all.
- ___14. { T or F } The command `chmod og+rx abc` is equivalent to `chmod 755 abc`
- ___15. { T or F } The command `chmod o+x abc` makes the file abc executable by group.
- ___16. { T or F } The command `chmod 700 abc` is equivalent to `chmod og-wrx abc`
- ___17. { T or F } The command `history` prints ALL unix commands you typed.
- ___18. { T or F } The command `uniq file` removes all repeated lines in file.
- ___19. { T or F } The command `grep hello file` prints all lines in file that contains hello.
- ___20. { T or F } The command `grep -i hello file` prints all lines in file not containing hello.

Circle if the statement is True (T) or False (F). Each question is worth 1 point. Assume that the content of the file abc.txt is as follows:

```
northwest NW Charles Main 3.0 .98 3 34
western WE Sharon Gray 5.3 .97 5 23
southwest SW Lewis Dalsass 2.7 .8 2 18
southern SO Suan Chin 5.1 .95 4 15
southeast SE Patricia Hemenway 4.0 .7 4 17
eastern EA TB Savage 4.4 .84 5 20
northeast NE AM Main Jr. 5.1 .94 3 13
north NO Margot Weber 4.5 .89 5 9
central CT Ann Stephens 5.7 .94 5 13
```

- ___21. { T or F } The command `grep -i nw abc.txt` prints the line(s)
northwest NW Charles Main 3.0 .98 3 34
southeast SE Patricia Hemenway 4.0 .7 4 17
- ___22. { T or F } The command `grep nw abc.txt` prints the line(s)
northwest NW Charles Main 3.0 .98 3 34
southeast SE Patricia Hemenway 4.0 .7 4 17

___23. { T or F } The command `grep "^n" abc.txt` prints the line(s)

```
northwest NW Charles Main 3.0 .98 3 34
northeast NE AM Main Jr. 5.1 .94 3 13
north NO Margot Weber 4.5 .89 5 9
```

___24. {T or F} The command `grep "5\.." abc.txt` prints the line(s)

```
western WE Sharon Gray 5.3 .97 5 23
southern SO Suan Chin 5.1 .95 4 15
northeast NE AM Main Jr. 5.1 .94 3 13
north NO Margot Weber 4.5 .89 5 9
central CT Ann Stephens 5.7 .94 5 13
```

___25. {T or F} The command `grep "[A-Z][A-Z] [A-Z]" abc.txt` prints the line(s)

```
eastern EA TB Savage 4.4 .84 5 20
northeast NE AM Main Jr. 5.1 .94 3 13
```

26. Which of the following UNIX commands will not take the user *student5* to his personal home directory?

- a. `cd`
- b. `cd /~`
- c. `cd ~`
- d. `cd ~student5`

27. What is a *shell* in UNIX?

- a. a program through which users can issue commands to UNIX
- b. a window management system
- c. the login screen
- d. the thing that rides on the back of a turtle in UNIX

28. What is the generic syntax for all UNIX commands?

- a. command name, followed by arguments, followed by options
- b. command name followed by arguments
- c. command name followed by options
- d. command name, followed by options, followed by arguments

29. Which of the following represents an absolute path?

- a. `../home/file.txt`
- b. `bin/cat`
- c. `cosc3411/`
- d. `/usr/bin/cat`

30. Which of these commands will set the permissions on file *textfile* to read and write for the owner, read for the group, and nothing for everyone else?
- `chmod 046 textfile`
 - `chmod 640 textfile`
 - `chmod 310 textfile`
 - `chmod rw r nil textfile`
31. Which of the following is not a UNIX file type?
- plain file
 - special file
 - batch file
 - directory file
32. When you use the `ln` command, which of the following occurs?
- a file is created that points to an existing file
 - a file is created that is a copy of an existing file
 - a file is moved from one location to another
 - a file is renamed
33. What UNIX command is used to update the modification time of a file?
- `time`
 - `modify`
 - `cat`
 - `touch`
34. Which command will print the contents of all files in the current directory whose names start with the character "a" and end with a period (".") followed by any two characters followed by a number?
- `ls a*.[0-9]`
 - `ls a*.[0-9]`
 - `cat a*.[0-9]`
 - `cat a*.[0-9]`
35. Which of these is not a common UNIX shell in use today?
- `bash`
 - `sh`
 - `fresh`
 - `ksh`
36. In `ksh`, what is the difference between the expressions `VAR` and `$VAR`?
- `VAR` refers to a variable name and `$VAR` to its value
 - `VAR` refers to a variable value and `$VAR` to its name
 - `VAR` refers to an integer variable and `$VAR` to a string variable
 - both expressions refer to the same thing

37. Which of these expressions shows the proper way to add the directory /usr/bin to your path?
- PATH+=/usr/bin
 - PATH=/usr/bin
 - \$PATH:/usr/bin
 - PATH=\$PATH:/usr/bin
38. What is the effect of the command `alias up2="cd ../../"`?
- typing "`cd ../../`" at a shell prompt causes the shell to print "`up2`"
 - typing "`up2`" at a shell prompt takes you up two levels in the directory tree
 - you immediately go up two levels in the directory tree and a new alias is created
 - an error message is printed
39. Which of the following is not a benefit of the fact that many UNIX commands operate on plain ASCII text files?
- the same file can be used by many programs
 - output to the terminal and to files can be done in the same way
 - most current UNIX installations have a graphical user interface
 - these commands can be used as filters for the output of other commands
40. What is the default datatype of variables in ksh shell scripts?
- integer
 - floating point
 - character
 - string

```

Guest*:501:513:PC Guest:/home/Guest:/bin/bash
richard*:1000:513:Richard Userid:/home/richard:/bin/bash

```

41. The above figure shows the contents of what file?
- /etc/passwd
 - /etc/security
 - /etc/users
 - /etc/login
42. In Unix, how many permissions are there?
- 3
 - 5
 - 7
 - 12
43. In Unix, 5 corresponds to what permission?
- r--
 - r-x
 - rw-
 - wx
44. When setting file permissions in Linux, who are they set for?
- local, global, user
 - owner, group, global
 - owner, group, other
 - owner, global, other

45. In Unix, if you wanted a user to create files in a directory, you would give the directory what permission?
- a. create
 - b. modify
 - c. write
 - d. execute
46. In Unix, if you wanted to allow a user to modify file permissions in a directory, you would give the directory what permission?
- a. read
 - b. modify
 - c. write
 - d. execute
47. In Unix, if you wanted to allow a user to list the contents of a directory, you would give the directory what permission, at least?
- a. read
 - b. write
 - c. list
 - d. execute
48. In Unix, if you wanted to allow a user to delete a file, you would give the file the what permission?
- a. read
 - b. write
 - c. delete
 - d. read and write
49. In Linux, what is the primary utility for changing permissions?
- a. chperm
 - b. setperm
 - c. chmod
 - d. setmod
50. To delete a file called mynotes.txt, which command do you use?
- a. del -i mynotes.txt
 - b. rmdir mynotes.txt
 - c. pico mynotes.txt
 - d. rm -i mynotes.txt
 - e. None of the above commands will work.
51. How do you get help about the command "cp"?
- a. help cp
 - b. man cp
 - c. cp ?
 - d. \$cp
52. How do you list all the files that are in the current directory?
- a. list all
 - b. ls -full
 - c. ls -a
 - d. li
53. How do you rename file "new" into file "old"?
- a. mv new old
 - b. cp new old
 - c. rn new old
 - d. touch new old

54. How do you create a new directory called "flower"?
- a. newdir flower
 - b. mkdir flower
 - c. crdir flower
 - d. newdir flower
55. What is the command to search all files in your current directory for the word "plasmodium"?
- a. grep plasmodium *
 - b. find plasmodium -all
 - c. lookup plasmodium *
 - d. ls -l plasmodium
56. How do you print the first 15 lines of all files ending by ".txt"?
- a. print 15.txt
 - b. cat *.txt -length=15
 - c. head -15 *.txt
 - d. count -f15 *.txt
57. Make a copy of file "upper" in the directory two levels up.
- a. jump -2 upper
 - b. cp upper ../../
 - c. cp upper -2/
 - d. mv ../upper
58. Count the files you own in all your directories where your userid is *myusername*.
- a. ls -lR | grep *myusername* | wc -l
 - b. ls -a | cnt *
 - c. ls -n ~*myusername*
 - d. lsfile -a | cnt
59. Change the current directory to `/usr/local/bin`
- a. mv /usr/local/bin
 - b. cd /usr/local/bin
 - c. setdir /usr/local/bin
 - d. changedir /usr/local/bin
60. How do you change the access permission (for the user's group to read/write) to all the files in the current directory containing the word "cali" in their names?
- a. chmod g+rw *cali*
 - b. setperm r+w *cali*
 - c. chmod 0060 *cali*
 - d. chmod g-rw *cali*

61. Create a new file "new.txt" that is a concatenation of "file1.txt" and "file2.txt".
- cat file1.txt file2.txt > new.txt
 - make new.txt=file1.txt+file2.txt
 - tail file1.txt | head file2.txt > new.txt
 - ls file1.txt+file2.txt | new.txt
62. Which of the following is true?
- UNIX is a widely used mail system.
 - UNIX is case sensitive.
 - UNIX has a graphical user interface.
 - All of the above are true.
 - None of the above is true.
63. To list the permissions on files, which of the following commands will work?
- ls
 - ls -a
 - ls -l
 - more -al
 - All of the above will work.
64. The file mypage.html has permissions set as `r w - - - - -`
Which of the following will change the permissions so that the file can be viewed on the WWW?
- chmod og+x mypage.html
 - chmod og+x ~
 - chmod og+r index.html
 - chmod og+r mypage.html
 - None of the above will work
65. When creating a directory as an ordinary user, which of the following is true?
- The default permissions are: `r w x - - - - -`
 - You must be in your home directory.
 - You use the pico Unix command to create a directory
 - The directory name must end in `_html`
 - All of the above are true.
66. The file assign4.html has permissions set as `r w x r w x r w x`. This means that:
- The file is really a directory and was named incorrectly.
 - It is impossible for an html file to have permissions set that way.
 - Everyone can read, write, and execute the file.
 - The file can not be viewed on the WWW.
 - All of the above are true.

67. Which command is used to create the directory abc in the previous (parent) directory?
- a. `mkdir abc`
 - b. `mkdir ./abc`
 - c. `mkdir ../abc`
 - d. `mkdir ../../abc`
 - e. None of the above will work.
68. Which of the following commands displays the full pathname of the directory you are positioned in?
- a. `man pwd`
 - b. `cd`
 - c. `cd ~`
 - d. `pwd`
 - e. `ls`
69. What will the following command do? `chmod og+r *.jpg`
- a. Change the permissions on the file *.jpg so that it is readable.
 - b. Change the permissions on all image files so that they can be displayed on the WWW.
 - c. Change the permissions on any file that ends in .jpg in the current dir. viewable on the WWW.
 - e. Change permissions on the directory so that image files can be saved in it.
 - e. It is not a valid command because the file name contains a *.
70. To rename the file a.html to b.html, which command do you use?
- a. `cp -i b.html a.html`
 - b. `mv -i b.html a.html`
 - c. `cp -i a.html b.html`
 - d. `rename -i a.html b.html`
 - e. `mv -i a.html b.html`