

Practice Assignment

Note: Need not to submit as assignment, it is only for practice.

1. Write a shell script to calculate simple interest.
2. Write a shell script to calculate the average of a set of N number.
3. Write a Unix shell script to find the sum of number to given number.
e.g. if entered number is 5 then $1+2+3+4+5$
4. Write a shell script to perform like calculator. It should ask for the number and operand from the user.
5. Write a shell script to calculate the area of rectangle. It should take the value from the command line.
6. Write a Unix Shell Script which prints the following
 - a. Current home directory.
 - b. Current user name.
 - c. The message "Today is:" with current date in MM/dd/yy format
 - d. The message "No of users logged in:" with total no of current logged in users
 - e. The message "Terminal:" With you own terminal number
7. Write a shell script to create a command line calculator.
 - a. e.g. input: mycal 5 + 5 Result: 10, input: mycal 5 / 5 result: 1
8. Write a shell script that takes as command line input a number N and a word, it then prints the word n times., one word per line
9. Write a shell script to rename file having extension sh to exe.
10. Write a Unix shell script to accept 10 number and tell how many are +ve, -ve and zero. Also display the in ascending order.
11. Write a shell script to accept five number and display max and min value. If any two or three or four values are same, then display proper message.
12. Write command to check when file was last used?
13. Write different date format on terminal using different optional structure of date?
14. Using sort command to sort a file and copy its content to some other file?
15. Write a command to check when file was last used?
16. Use alias command, for performing different operations?
17. Use head and tail command to select last 3 entries from file?
18. Use shift command on a given variable entries?

19. Perform compress and un-compress on a file and directories?
20. Using cut command, cut 6-10 line from a file shortlist?
21. Create a file data.txt with several lines and column? Perform sum of column 7 using awk files?
22. Write a shell script using awk that use “getline ()” function?
23. Write a shell script that differentiate the use of “-f” and “-F” in awk?
24. Write a shell script using awk for adding header in a txt file?
25. Write a awk shell script for finding character “a” in a file name.txt? “Hint: Create a file name.txt containing different name”
26. Using touch command modify the access time of a file?
27. Using function write a script of Fibonacci-series?
28. Write a shell script to differentiate local and global variable?
29. Using sed command replace the word UNIX with Linux in a file?
30. Using sed command replace last occurrence of UNIX in all line with Linux in a file?
31. Use print flag to replace line twice on terminal with using sed command?
32. Use sed command to replace specific line in a file?
33. Write awk command to print rows 3 to 5 of a file?
34. Write multiple sed command using pipe?
35. Write multiple awk command using pipe?
36. Write sed command such that multiple sed command in a single sed command?
37. Write sed command to replace range of line in a file, ex: line 3 to 6, line 4 to 9 etc?
38. Write sed command to delete specific pattern from a file?
39. Write sed command to add a new line after a pattern match is found?
40. Write sed command to add a new line before a pattern match is found?
41. Write sed command to replace entire line with a new line?
42. Write sed command to print the first character of every word in parenthesis?
43. Write sed command to quit after 3rd line?

44. Explain awk command structure for different execution using different example?
45. Use different variant of ls commands?
46. Use different variant of ps command?
47. Use kill, terminate, shutdown command with several options?
48. Write several date formats?
49. Use banner command for writing your name?
50. Use chmod command for performing different mode change operations?
51. Use pr command and modify the page width?
52. Using if else ladder tries to find given year is a leap year?
53. Write a command to print the lines that has the pattern "unix" in all the files in a directory?
54. Write a command to print the lines that has the word "unix" in all the files in a directory and suppress the filename in the output?
55. Write a command to print the lines that has the word "unix" while ignoring the case?
56. When you use a single file as input to the grep command to search for a pattern, it won't print the filename in the output. Now write a grep command to print the filename in the output without using the '-H' option.?
57. Write a Unix command to display the lines in a file that do not contain the word "unix"?
58. Write a command to print the file names in a directory that has the word "unix"?
59. Write a command to print the file names in a directory that does not contain the word "unix"?
60. Write a command to print the line numbers along with the line that has the word "unix"?
61. Write a command to print the lines that starts with the word "unix"?
62. Write a command to print the lines that starts with the word "start"?
63. Write a command to print the lines which end with the word "unix"?
64. Write a command to select only those lines containing "unix" word?
65. By default, head print how many lines of as file?
66. How to read 2nd to 3rd last line using head and tail command?
67. Write a command to find the length of a line in a file?

- 68. How to remove the footer from a file?
- 69. How to remove the footer from a file?
- 70. How to remove the footer from a file?
- 71. How to get the last word from a line in Unix file?
- 72. How to check if the last command was successful in Unix?
- 73. Write command to list all the links from a directory?
- 74. Create a read-only file in your home directory?
- 75. How to display the first 20 lines of a file?
- 76. Write a command to print the last line of a file?

Let we have a file employee.txt

100	Thomas	Manager	Sales	\$5,000
200	Jason	Developer	Technology	\$5,500
300	Sanjay	Sysadmin	Technology	\$7,000
400	Nisha	Manager	Marketing	\$9,500
500	Randy	DBA	Technology	\$6,000

AWK

1. Using AWK prints every line from the file.
2. Print the lines which matches with the pattern ('/Thomas/>/Nisha/').
3. Print only specific field \$2 \$5.
4. Find the employees who has employee id greater than 200.
5. Print the list of employees in Technology department.
6. Print number of employees in Technology department.