

Bash Scripting; Attach all .sh files



Exercise 1 100

Write a shell script that prints "Shell Scripting is Fun!" to the screen.

Hint 1: Remember to make the shell script executable with the "chmod" command.

Hint 2: Remember to start your script with a shebang!

Modify the shell script from exercise 1 to include a variable. The variable will hold the contents of the message "Shell Scripting is Fun!".

Exercise 3 150

Write a shell script to check to see if the file "/etc/shadow" exists. If it does exist, display "Shadow passwords are enableed."

Next, check to see if you can write to the file. If you can, display "You have permission to edit /etc/shadow." If you cannot, display "You do NOT have permission to edit /etc/shadow."

Exercise 4 100

Write a shell script that displays "man", "bear", "pig", "dog", "cat", and sheep on the screen with each appearing on a separate line. Try to do this in as few lines as possible.

Hint: Loops can be used to perform repetitive tasks.

Write a shell script that prompts the user for the name of a file or directory and reports if it is a regular file, a directory, or other type of file.

Also perform an Is command against the file or directory with the long listing option.

Modify the previous script so that it accepts the file or directory name as an argument instead of prompting the user to enter it.

Modify the previous script to accept an unlimited number of files and directories as arguments.

Hint: You'll want to use a special variable.

Write a shell script that displays "This script will exit with a 0 exit status." Be sure that the script does indeed exit with a 0 exit status.

Write a shell script with a function that displays the number of files in the present working directory. Name this function "file_count" and call it in your script. If you use a variable in your function, remember to make it a local variable.

Hint: The wc utility is used to count the number of lines, words, and bytes.

Exercise 10 150

Write a shell script that loops through the /etc/passwd file one line at a time. Prepend each line with a line number followed by a colon and then a space.

Example output:

1: root:x:0:0:root:/root:/bin/bash

2: daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin

3: bin:x:2:2:bin:/bin:/usr/sbin/nologin

4: sys:x:3:3:sys:/dev:/usr/sbin/nologin

Write a shell script that renames all files in the current directory that end in ".jpg" to begin with today's date in the following format: YYYYMMDD. For example, if a picture of my cat was in the current directory and today was October 31, 2016 it would change name from "mycat.jpg" to "20161031mycat.jpg".

Hint: Look at the format options to the date command.

For "extra credit" make sure to gracefully handle instances where there are no ".jpg" files in the current directory. (Hint: Man bash and read the section on the nullglob option.)