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Homework #5

Using what you’ve learned so far in the course, specifically during week 6, answer the following questions.

Question 1. Explain the function of **break** and **continue** commands in UNIX/Linux.

Break – Immediately terminates the entirety of the loop when used.

Continue – Terminates that iteration of the loop but continues to the next iteration.

-Question 2. Name two commands that are used in bash script to perform arithmetic calculations. Describe the difference between them.

expr – Can only do integers

bc – Can do many more calculations such as floating points and doubles, more precise

Question 3. Explain what is happening in Lines 1, 4, 9, and 18. What is the output of this operation?

Line 01: $ x=5 #Defining variable as x equal to the integer 5

Line 02: $ y=3

Line 03: $

Line 04: $ if [ $x -lt $y ] #Beginning if statement that says if the value of x is less than the value of y then do this command. Which is printing " ${x} is less than ${y}"

Line 05: > then

Line 06: > echo " "

Line 07: > echo " ${x} is less than ${y}"

Line 08: > echo " "

Line 09: > elif [ $x -eq $y ] #else if that says if the value in x is equal to the value in y then do this command, which is (value of x) is equal to (value of y).

Line 10: > then

Line 11: > echo " "

Line 12: > echo " ${x} is equal to ${y}"

Line 13: > echo " "

Line 14: > else

Line 15: > echo " "

Line 16: > echo " ${x} is greater than ${y}"

Line 17: > echo " "

Line 18> fi #Ends the if statement

#Output is “5 is greater than 3”

Question 4. Which of the following programming constructs can be used in a bash shell script:

a. if…do statement

**b. case command**

**c. for...do loop**

**d. while…do loop**

e. until…done loop

Question 5. Explain the difference between && and ||.

&& - Tests if something is true while || tests if something is false, they are opposites of each other but still put into the same format of [test condition] (&& or ||) command

Question 6. What command can be used to take the place of several nested **if** statements in a bash shell script?

The case command because it allows for several different test conditions in less lines/less complex of code, making it look nicer and more efficient

Question 7. What command ends every **do** loop in a while…do statement? What command ends an until…do statement?

done for both of the answers.

Question 8. Write a script that checks the user’s home directory for a file named **hw5file**. Assuming it’s present, append the file with, “Today’s date is **mm/dd/yy**”. If you can’t locate the file **hw5file**, then create it and store, “This is **username** on **computer\_name** making my first entry.”

Copy your completed script to the instructor’s Submissions folder (file path: /home/jalcorn/Submissions/Fall2018/hw5/) using the naming convention “lastname\_hw5”.