Linux Teaser 1

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Implement a pipeline by writing down a single line linux command, where the end result of the pipeline is as given below

1) Output of the date command will be stored in a file fulldate.txt

2) The day part of the date output will be stored in a file today.txt

Linux Teaser 2

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1) What will be the output of this command

date | echo

Q - Looking at the output, analyze and answer why you will get the output the way it is appearing.

Q - What modification will you suggest so that the output of the date command can be echoed on the terminal?

Linux Teaser 3

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Create an alias calmagic, which will print

1) a calendar month supplied from command line

2) A calendar 1 month before the command line suppled month

3) A calendar 1 month after the command line suppled month

in a file mymonths.txt in your home folder

For example

If i am going to write a command

echo "12 2017" | calmagic

It should print the 11th month of 2017, 12th month of 2017 and 1st month of 2018 in a file mymonths.txt

Hint -

1) Refer man cal

2) You need to put your alias in a file .bahs\_aliases. and relaunch the terminal window

3) See how to create aliases in linux

4) Try it on Ubuntu machine.

Linux Teaser 4

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What will be the output of following command

sudo find / -type f -size -100k -size +5M | wc -l

Linux Teaser 5

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Write down a single line linux command which will

1. Find all the files in / having size greater than 100k and less than 5M

2. Copy the found files in a directory ~/Desktop/copy\_here

Linux Teaser 6

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Perform following operations in sequence

1) Create a folder haystack in ~/Desktop

2) Create 500 folders in above haystack/ with naming conventions as folder1, folder2,...folder500

3) Create 100 files in each of the above 500 folders with naming conventions as file1, file2,...file100

4) Execute the following command to randomly put needle.txt

touch haystack/folder$(shuf -i 1-500 -n 1)/needle.txt

Find out what this command is doing?

5) Write down a command to find whare needle.txt is and then copy it to ~/Desktop/

Hint - Use brace expansion concept

Linux Teaser 7

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Write a command to find the number of lines in a file /etc/cups/cups-browsed.conf

Linux Teaser 8

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Write down a single line linux command that List the contents of /etc folder and

take first 20 records only sort the above listing based on 5th column in a reverse

chronological order

Linux Teaser 9

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What following command does?

ls -F /etc | grep -v / | sort -r > files.txt

Linux Teaser 10

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"Using your knowledge of WHILE loop, can you determine where the mistake is? What will happen if it runs?

repl:~$ cat emp\_script.sh

#!/usr/bash

emp\_num=1

while [ $emp\_num -le 1000 ];

do

cat emp\_num-dailySales.txt | egrep 'Sales\_total' | sed 's/.\* ://' > emp\_num-agg.txt

done

Linux Teaser 11

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Refer the problem statement in a file ./LinuxData/S1-6\_Backup+Script+Project+-+Brief.pdf

Following is a sample of a bash script with professional comments.

#!/bin/bash

# Author: Amit S Khedkar

# Date Created: 02/04/2023

# Last Modified: 02/04/2023

# Description:

# This script backups the entire home folder in a tar.gz format

# Usage:

# backup\_script

Linux Teaser 12

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Refer the problem statement in a file ./LinuxData/Command+Substitution+Project+-+Brief.pdf

Linux Teaser 13

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Converting Fahrenheit to Celsius

You work in the analytics department for an Indian company that recently purchased an American company. The files and data

from the US company are in the imperial system and need to be converted to metric. This sounds like a great opportunity

to use your Bash skills to create a program which will assist.

Your task is to write a program/script(tempconverter.sh) that takes in a single number (a temperature in Fahrenheit) as an

ARGV argument(commandline argument), converts it to Celsius and returns the new value. There may be decimal places.

At all times use 2 decimal places.

The formula for Fahrenheit to Celsius is:

C = (F - 32) x (5/9)

Linux Teaser 14

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1) Refactor above shell script tempconverter.sh by defining a function

convert\_temp which will take a parameter, a temp in Farenhite,

and return its Celcius counter part.

2) Store the result of this function in in a variable converted.

3) print the output as "30F incelcius is <x> C"

Where <x> is a result of a call to the convert\_temp function.

4) Is it possible to pass the Farenhite temperature as a command line parameter to the script?

Linux Teaser 15

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1) Refactor above shell script tempconverter.sh by accepting options either -c <tempincel> or -f <tempinfar>

and give the output the same way,was giving in previous lab.

2) Try to modularize the code.