First Bash Script

#!/bin/bash

echo "A Quick System Audit Script"

date

echo ""

echo "Machine Type Info:"

echo $MACHTYPE

echo -e "Uname info: $(uname -a) \n"

echo -e "IP Info: $(ip addr | grep inet | tail -2 | head -1) \n"

echo "Hostname: $(hostname -s) "

Bonus

#!/bin/bash

echo "A Quick System Audit Script"

date

echo ""

echo "Machine Type Info:"

echo $MACHTYPE

echo -e "Uname info: $(uname -a) \n"

echo -e "IP Info: $(ip addr | grep inet | tail -2 | head -1) \n"

echo "Hostname: $(hostname -s) "

echo "DNS Servers: "

cat /etc/resolv.conf

echo "Memory Info:"

free

echo -e "\nCPU Info:"

lscpu | grep CPU

echo -e "\nDisk Usage:"

df -H | head -2

echo -e "\nWho is logged in: \n $(who) \n"

Custom Command

#!/bin/bash

mkdir ~/research 2> /dev/null

echo "A Quick System Audit Script" > ~/research/sys\_info.txt

date >> ~/research/sys\_info.txt

echo "" >> ~/research/sys\_info.txt

echo "Machine Type Info:" >> ~/research/sys\_info.txt

echo $MACHTYPE >> ~/research/sys\_info.txt

echo -e "Uname info: $(uname -a) \n" >> ~/research/sys\_info.txt

echo -e "IP Info: $(ip addr | grep inet | tail -2 | head -1) \n" >> ~/research/sys\_info.txt

echo "Hostname: $(hostname -s) " >> ~/research/sys\_info.txt

echo -e "\n777 Files:" >> ~/research/sys\_info.txt

find / -type f -perm 777 >> ~/research/sys\_info.txt

echo -e "\nTop 10 Processes" >> ~/research/sys\_info.txt

ps aux -m | awk {'print $1, $2, $3, $4, $11'} | head >> ~/research/sys\_info.txt

Variable and if

#!/bin/bash

#Check if script was run as root. Exit if false.

if [ $UID -ne 0 ]

then

echo "Please run this script with sudo."

exit

fi

# Define Variables

output=$HOME/research/sys\_info.txt

ip=$(ip addr | grep inet | tail -2 | head -1)

execs=$(find /home -type f -perm 777 2> /dev/null)

# Check for research directory. Create it if needed.

if [ ! -d $HOME/research ]

then

mkdir $HOME/research

fi

# Check for output file. Clear it if needed.

if [ -f $output ]

then

rm $output

fi

echo "A Quick System Audit Script" >> $output

date >> $output

echo "" >> $output

echo "Machine Type Info:" >> $output

echo -e "$MACHTYPE \n" >> $output

echo -e "Uname info: $(uname -a) \n" >> $output

echo -e "IP Info:" >> $output

echo -e "$ip \n" >> $output

echo -e "Hostname: $(hostname -s) \n" >> $output

echo "DNS Servers: " >> $output

cat /etc/resolv.conf >> $output

echo -e "\nMemory Info:" >> $output

free >> $output

echo -e "\nCPU Info:" >> $output

lscpu | grep CPU >> $output

echo -e "\nDisk Usage:" >> $output

df -H | head -2 >> $output

echo -e "\nWho is logged in: \n $(who -a) \n" >> $output

echo -e "\nexec Files:" >> $output

echo $execs >> $output

echo -e "\nTop 10 Processes" >> $output

ps aux --sort -%mem | awk {'print $1, $2, $3, $4, $11'} | head >> $output

fi

Loop

#!/bin/bash

# Create Variables

nums=$(seq 0 9)

states=('Nebraska' 'California' 'Texas' 'Hawaii' 'Washington' 'New York')

ls\_out=$(ls)

execs=$(find /home -type f -perm 777 2> /dev/null)

# Create For Loops

# Create a loop that prints 3, 5, or 7

for num in ${nums[@]}

do

if [ $num = 3 ] || [ $num = 5 ] || [ $num = 7 ]

then

echo $num

fi

done

# Create a loop that looks for 'Hawaii'

for state in ${states[@]};

do

if [ $state == 'Hawaii' ];

then

echo "Hawaii is the best!"

else

echo "I'm not a fan of Hawaii."

fi

done

# Create a `for` loop that prints out each item in your variable that holds the output of the `ls` command.

for x in ${ls\_out[@]}

do

echo $x

done

# Bonus

# Create a for loop to print out execs on one line for each entry

for exec in ${execs[@]}

do

echo $exec

done

Useful loop

#Display CPU usage

echo -e "\nCPU Info:" >> $output

lscpu | grep CPU >> $output

# Display Disk usage

echo -e "\nDisk Usage:" >> $output

df -H | head -2 >> $output

#Display the current user

echo -e "\nCurrent user login information: \n $(who -a) \n" >> $output