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| Portfolio Task 3 |  |
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|  | 03/09/2022COIT11241 Cyber Security Technologies |
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Private Repository:

<https://github.com/DilshaWe/ePortfolio.git>

Code:

#!/bin/bash

# yum list installed | awk '{print $1}' > packages.txt

env\_setup(){

apt list --installed | awk '{print $1}' > packages.txt

systemctl list-units --type=service --all | head -n -7 | awk '{print $1}' | egrep -v '[^.a-zA-Z0-9.-]' > services.txt

sudo apt-get install net-tools -y

netstat -tulpn | grep LISTEN > ports.txt

arp -an | awk '{print $4}' > aprovedmacs.txt

}

while true; do

read -p "Do you wish to run the environment set up program(y or n)? (If you run this at first time, press y) : " yn

case $yn in

[Yy]\* ) env\_setup ; break;;

[Nn]\* ) break;;

\* ) echo "Please answer yes or no.";;

esac

done

readarray -t packagesArrFi < packages.txt

readarray -t servicesArrFi < services.txt

readarray -t portsArrFi < ports.txt

#mapfile -t packageAr < <( yum list installed | awk '{print $1}' )

mapfile -t packageAr < <( apt list --installed | awk '{print $1}' > packages.txt )

mapfile -t servicesAr < <( systemctl list-units --type=service --all | head -n -7 | awk '{print $1}' | egrep -v '[^.a-zA-Z0-9.-]' )

mapfile -t portsAr < <(netstat -tulpn | grep LISTEN )

for i in "${packageAr[@]}"

do

if printf '%s\0' "${packagesArrFi[@]}" | grep -Fqxz "$i"

then

continue

else

echo 'suspecious package found :' $i

fi

done

for i in "${servicesAr[@]}"

do

if printf '%s\0' "${servicesArrFi[@]}" | grep -Fqxz "$i"

then

continue

else

echo 'suspecious service found : ' $i

fi

done

for i in "${portsAr[@]}"

do

if printf '%s\0' "${portsArrFi[@]}" | grep -Fqxz "$i"

then

continue

else

echo 'suspecious ports found : ' $i

fi

done

#!/bin/bash

readarray -t packagesArrFi < packages.txt

readarray -t servicesArrFi < services.txt

readarray -t portsArrFi < ports.txt

# mapfile -t packageAr < <( yum list installed | awk '{print $1}' )

mapfile -t packageAr < <( apt list --installed | awk '{print $1}' > packages.txt )

mapfile -t servicesAr < <( systemctl list-units --type=service --all | head -n -7 | awk '{print $1}' | egrep -v '[^.a-zA-Z0-9.-]' )

mapfile -t portsAr < <(netstat -tulpn | grep LISTEN )

for i in "${packageAr[@]}"

do

if printf '%s\0' "${packagesArrFi[@]}" | grep -Fqxz "$i"

then

continue

else

echo 'suspecious package found :' $i

fi

done

for i in "${servicesAr[@]}"

do

if printf '%s\0' "${servicesArrFi[@]}" | grep -Fqxz "$i"

then

continue

else

echo 'suspecious service found : ' $i

fi

done

for i in "${portsAr[@]}"

do

if printf '%s\0' "${portsArrFi[@]}" | grep -Fqxz "$i"

then

continue

else

echo 'suspecious ports found : ' $i

fi

done

# 4th question

curl "http://dev.virtualearth.net/REST/v1/Imagery/Map/Road/-16.9206560000013,145.777730700002/15?mapSize=500,500&key=AlYOKsYd2-Kn51Hnnws3Ua\_3TMbDjlO85lMbpdi9aT92DZe8NRyteXVvhzJOlViG" > htmlmap.png

#fifth question

readarray -t arArrpFi < aprovedmacs.txt

mapfile -t arpArr < <( arp -an | awk '{print $4}' )

for i in "${arpArr[@]}"

do

if printf '%s\0' "${arArrpFi[@]}" | grep -Fqxz "$i"

then

continue

else

echo 'unaproved max is joined : ' $i

fi

done

Output:





