#!/bin/bash

while getopts "adhu:g:G:p:" arg; do

case $arg in

u)

USER\_NAME=${OPTARG}

;;

g)

GROUP\_NAME=${OPTARG}

;;

G)

SUPPLEMENTAL\_GROUPS=${OPTARG}

;;

a)

ADD\_USER\_FLAG="1"

;;

d)

DELETE\_USER\_FLAG="1"

;;

p)

PASSWORD=${OPTARG}

;;

h)

usage

esac

done

#functions area

function usage {

echo "ADD USER: practice-script.sh -a -u USER\_NAME -g GROUP\_NAME -p PASSWORD [OPTIONAL: -G SUPPLEMENTAL\_GROUPS]"

echo

echo "if using supplemental groups: provide a comma separated list"

echo "example: testgroup,testgroup2"

echo

echo "OR"

echo "DELETE USER: practice-script.sh -d -u USER\_NAME"

}

function create\_user {

# user, primary group, password

adduser $1 -m -g $2 -p $3

}

function create\_user\_with\_multiple\_groups {

# user, primary group, supplemental groups, password

adduser $1 -m -g $2 -G $3 -p $4

}

function create\_group {

groupadd $1

}

function create\_supplemental\_groups {

for i in $(echo $1 | sed 's/,/ /g'); do

groupadd $i

done

}

function user\_delete {

sudo userdel -r $1

}

function group\_delete {

sudo groupdel $1

}

function count\_number\_of\_users {

getent group $1 | awk 'BEGIN { FS = ":" }; { print $4 }' | sed 's/,/ /g' | wc -w

}

function list\_groups\_for\_user {

id -Gn $1

}

#main code starts

if [ -z "$USER\_NAME" ]; then

echo "no username provided"

usage

exit

fi

if [ -z "$GROUP\_NAME" ] && [ "$ADD\_USER\_FLAG" == "1" ]; then

echo "no group name provided"

usage

exit

fi

if [ -z "$PASSWORD" ] && [ "$ADD\_USER\_FLAG" == "1" ]; then

echo "no password provided when adding user"

usage

exit

fi

if [ "$ADD\_USER\_FLAG" == "1" ]; then

if [ -z "$SUPPLEMENTAL\_GROUPS" ]; then

create\_group $GROUP\_NAME

create\_user $USER\_NAME $GROUP\_NAME $PASSWORD

echo "done creating user $USER\_NAME in group $GROUP\_NAME"

else

create\_group $GROUP\_NAME

create\_supplemental\_groups $SUPPLEMENTAL\_GROUPS

create\_user\_with\_multiple\_groups $USER\_NAME $GROUP\_NAME $SUPPLEMENTAL\_GROUPS $PASSWORD

echo "done creating user: $USER\_NAME in primary group: $GROUP\_NAME with supplemental groups: $SUPPLEMENTAL\_GROUPS"

fi

fi

if [ "$DELETE\_USER\_FLAG" == "1" ]; then

echo "done deleting user: $USER\_NAME"

group\_list=$(list\_groups\_for\_user $USER\_NAME)

echo "group\_list: $group\_list"

for i in $group\_list; do

counter=$(count\_number\_of\_users $i)

if [ $counter -le 1 ]; then

echo "deleting group $i"

group\_delete $i

echo "done deleting group $i"

fi

done

echo "deleting user: $USER\_NAME"

user\_delete $USER\_NAME

echo "done deleting user: $USER\_NAME"

fi