#!/bin/bash

# This checks if the number of arguments is correct

# If the number of arguments is incorrect ( $# != 2) print error message and exit

if [[ $# != 2 ]]

then

  echo "backup.sh target\_directory\_name destination\_directory\_name"

  exit

fi

# This checks if argument 1 and argument 2 are valid directory paths

if [[ ! -d $1 ]] || [[ ! -d $2 ]]

then

  echo "Invalid directory path provided"

  exit

fi

# [TASK 1]

targetDirectory="$1"

destinationDirectory="$2"

# [TASK 2]

echo "Target Directory: $targetDirectory "

echo "Destination Directory: $destinationDirectory"

# [TASK 3]

currentTS=$(date +%s)

# [TASK 4]

backupFileName="backup-${currentTS}.tar.gz"

# We're going to:

  # 1: Go into the target directory

  # 2: Create the backup file

  # 3: Move the backup file to the destination directory

# To make things easier, we will define some useful variables...

# [TASK 5]

origAbsPath=$(pwd)

# [TASK 6]

cd "$destinationDirectory" || exit

destAbsPath=$(pwd)

# [TASK 7]

cd "$origAbsPath" || exit

cd "$targetDirectory" || exit

# [TASK 8]

yesterdayTS=$((currentTS - 24 \* 60 \* 60))

declare -a toBackup

for file in $(ls) # [TASK 9]

do

  # [TASK 10]

  if ((`date -r $file +%s` > $yesterdayTS))

  then

    toBackup+=($file)  # [TASK 11]

  fi

done

tar -czvf "$backupFileName" "${toBackup[@]}" # [TASK 12]

mv "$backupFileName" "$destAbsPath" # [TASK 13]

# Congratulations! You completed the final project for this course!