Final Project

Submitted on March 20, 2025

Shareable Link

PROMPT

Task 1: Submit a screenshot of your code following the comment "# [TASK 1]" in your completed backup.sh file.

Label this image: "01-Set_Variables.png (or .jpg, .jpeg)

This screenshot should show code that sets the $targetDirectory and $destinationDirectory variables to the correct values .

TASK 1

Task 1

Declare two veriables equel to the respective values, for first end second command line erguments.

RUBRIC

Did the learner upload the screenshot of code for Task 1?

● **1 point**
Correct. The learner's code resembles the following:

KV

```
targetDirectory=$1
destinationDirectory=$2
```

○ **0 points**
Incorrect. The code is incorrect, or no code was provided for this task.

PROMPT

Submit a screenshot of your code following the comment "# [TASK 2]" in your completed backup.sh file.

Label this image: "02-Display_Values.png (or .jpg, .jpeg)

This screenshot should show code that prints the target and destination directory paths to the user.

TASK 2

Display the values of the two command line arguments in the terminal

RUBRIC

Did the learner upload the screenshot of code for Task 2?

● **1 point**

KV

Correct. The learner placed:

- $targetDirectory and $destinationDirectory in the echo statements

Example:

```
echo "Target directory: $targetDirectory"
echo "Backup destination: $destinationDirectory"
```

○ 0 points

Incorrect. The code lacks $targetDirectory and $destinationDirectory in the echo statements.

PROMPT

Submit a screenshot of your code following the comment "# [TASK 3]" in your completed backup.sh file.

Label this image: "03-CurrentTS.png (or .jpg, .jpeg)

This screenshot should show code that sets the currentTS variable to the current timestamp in seconds.

TASK3

Define a variable currentTS to present the current timestamp, in seconds +%s

RUBRIC

Did the learner upload the screenshot of code for Task 3?

● **1 point** KV

Correct. The learner correctly defined currenTS using one of the following:

```
currentTS=$(date +%s)
currentTS=`date +%s`
```

(The +%s may be surrounded by quotes)

○ 0 points

Incorrect. The learned did not correctly define the currentTS variable.

PROMPT

Submit a screenshot of your code following the comment "# [TASK 4]" in your completed backup.sh file.

Label this image:"04-Set_Value.png (or .jpg, .jpeg)

This screenshot should show code that sets the backupFileName to the correct value.

TASK4

Define a variable called BackupFileName to store the compressed backup file

RUBRIC

Did the learner upload the screenshot of code for Task 4?

● **1 point** KV

Correct. The learner's code will result in backupFileName being correctly defined as Backup-[current timestamp in seconds].tar.gz as seen in the following:

```
backupFileName="backup-$currentTS.tar.gz"
```

○ 0 points

Incorrect.The learner's definition of backupFileName is wrong or no code is provided.

PROMPT

Submit a screenshot of your code following the comment "# [TASK 5]" in your completed backup.sh file.

Label this image:"05-Define_Variable.png (or .jpg, .jpeg)

This screenshot should show code that correctly defines the origAbsPath variable.

TASK5

Define a variable called origAbsPath that's map the absolute path of the currenct directory

RUBRIC

Did the learner upload the screenshot of code for Task 5?

● **1 point** KV

Correct. The learner correctly defined origAbsPath using the pwd command.

Either of the following is correct:

```
origAbsPath=$(pwd)
origAbsPath=`pwd`
```

○ 0 points

Incorrect. The learner did not correctly define origAbsPath or no code provided.

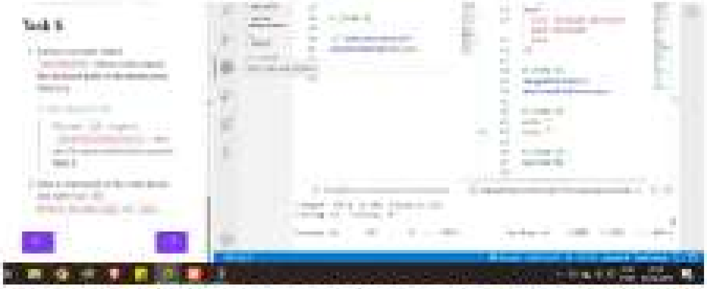
PROMPT

Submit a screenshot of your code following the comment “# [TASK 6]” in your completed backup.sh file.

Label this image:“06-Define_Variable.png (or .jpg, .jpeg)

This screenshot should show code that correctly defines the destAbsPath variable.

TASK6



USE A SIMILAR METHOD OF TASK5, BUT USING THE PATH OF THE DESTINATION DIRECTORY

RUBRIC

Did the learner upload the screenshot of code for Task 6?

● **1 point** KV

Correct. The learner correctly defined destAbsPath using one of the following:

```
cd $destinationDirectory
destAbsPath=$(pwd)
```

```
cd $destinationDirectory
destAbsPath=`pwd`
```

○ **0 points**

Incorrect. The learner's code is incorrect or no code is provided.

PROMPT

Submit a screenshot of your code following the comment "# [TASK 7]" in your completed backup.sh file.

Label this image: "07-Change_Directory.png (or .jpg, .jpeg)

This screenshot should show code that changes the current working directory to targetDirectory.

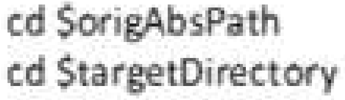
TASK7

Change the actual directory ($origAbsPath) for the targetdirectory ($targetDirectory)

RUBRIC

Did the learner upload the screenshot of code for Task 7?

● 1 point
Correct.The learner correctly changed the current working directory to targetDirectory using code like the following:



```
cd $origAbsPath
cd $targetDirectory
```

KV

○ 0 points
Incorrect. The code doesn't resemble the example code and fails to change the current working directory to targetDirectory.

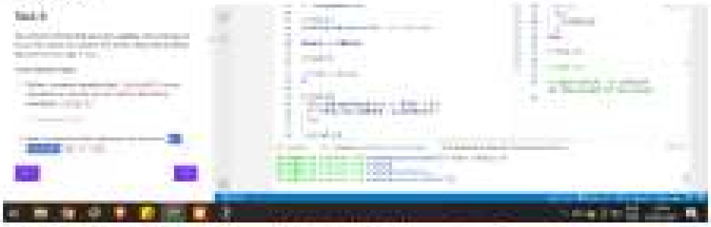
PROMPT

Submit a screenshot of your code following the comment "# [TASK 8]" in your completed backup.sh file.

Label this image: "08-YesterdayTS.png (or .jpg, .jpeg)

This screenshot should show code that sets yesterdayTS to the timestamp (in seconds) of 24 hours before currentTS.

TASK8



Find all modified files in the last twenty four hours

RUBRIC

Did the learner upload the screenshot of code for Task 8?

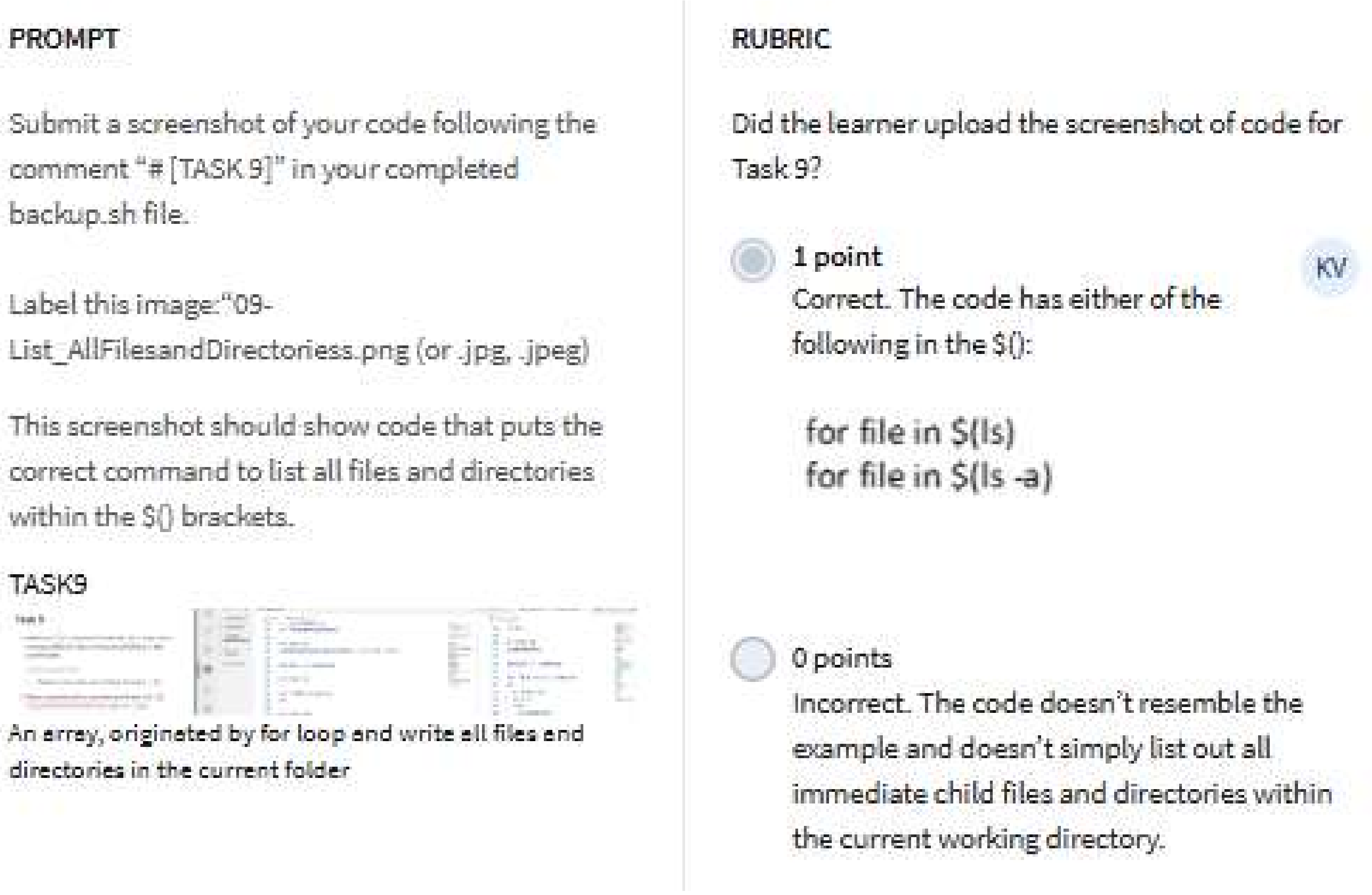
● **1 point** KV

Correct.The learner set yesterdayTS correctly using code resembling the following:

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

○ 0 points

Incorrect.The code doesn't resemble the example and fails to set yesterdayTS to 24 * 60 * 60 seconds less than currentTS.



PROMPT

Submit a screenshot of your code following the comment "# [TASK 9]" in your completed backup.sh file.

Label this image:"09-List_AllFilesandDirectoriess.png (or .jpg, .jpeg)

This screenshot should show code that puts the correct command to list all files and directories within the $() brackets.

TASK9

An array, originated by for loop and write all files and directories in the current folder

RUBRIC

Did the learner upload the screenshot of code for Task 9?

● **1 point**

Correct. The code has either of the following in the $():

```
for file in $(ls)
for file in $(ls -a)
```

○ 0 points

Incorrect. The code doesn't resemble the example and doesn't simply list out all immediate child files and directories within the current working directory.

PROMPT

Submit a screenshot of your code following the comment "# [TASK 10]" in your completed backup.sh file.

Label this image: "10-IF_Statement.png (or .jpg, .jpeg)

This screenshot should show code in the if statement and checks if file $file was updated within the past day.

TASK10

A script to get the last-modified date of a file in seconds using date -r $file + %s

RUBRIC

Did the learner upload the screenshot of code for Task 10?

● **1 point**

KV

Correct. You see the following code or similar that means the same:

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

○ **0 points**

Incorrect.The code doesn't resemble the example and does something other than what is required.

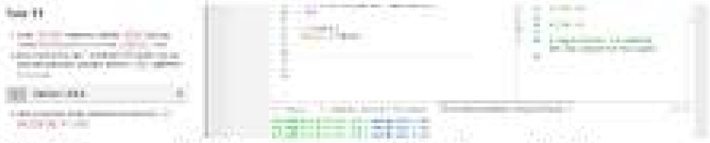
PROMPT

Submit a screenshot of your code following the comment "# [TASK 11]" in your completed backup.sh file.

Label this image: "11-Add_File.png (or .jpg, .jpeg)

This screenshot should show code that adds the name of the file that was updated within the past day to the toBackup array.

TASK11



The file was added to the array toBackup with the addction declaration : toBackup+=($file)

RUBRIC

Did the learner upload the screenshot of code for Task 11?

● **1 point** KV

Correct.You see the following code or similar that means the same:

```
toBackup+=($file)
```

○ 0 points

Incorrect.The code doesn't resemble the example and does something other than what is required.

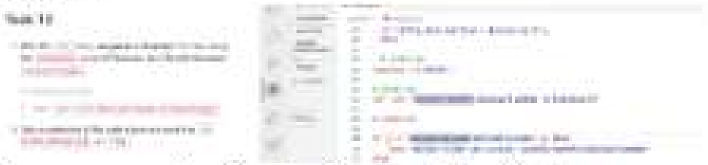
PROMPT

Submit a screenshot of your code following the comment "# [TASK 12]" in your completed backup.sh file.

Label this image: "12-Create_Backup.png (or .jpg, .jpeg)

This screenshot should show code that creates the backup file in the current directory which is an archived and compressed file containing all files in toBackup.

TASK12



Compress and Archive the files to a file with the name backupFileName.

RUBRIC

Did the learner upload the screenshot of code for Task 12?

● **1 point** KV

Correct. You see the following code:

```
tar -czvf $backupFileName ${toBackup[@]}
```

○ **0 points**

Incorrect. The code doesn't resemble the example and does something other than what is required.

PROMPT

Submit a screenshot of your code following the comment "# [TASK 13]" in your completed backup.sh file.

Label this image: "13-Move_Backup.png (or .jpg, .jpeg)

This screenshot should show code that moves the backup file created in task 12 to the path destinationPath

TASK13

Move the backupFileName to the destination directory located at destAbsPath

RUBRIC

Did the learner upload the screenshot of code for Task 13?

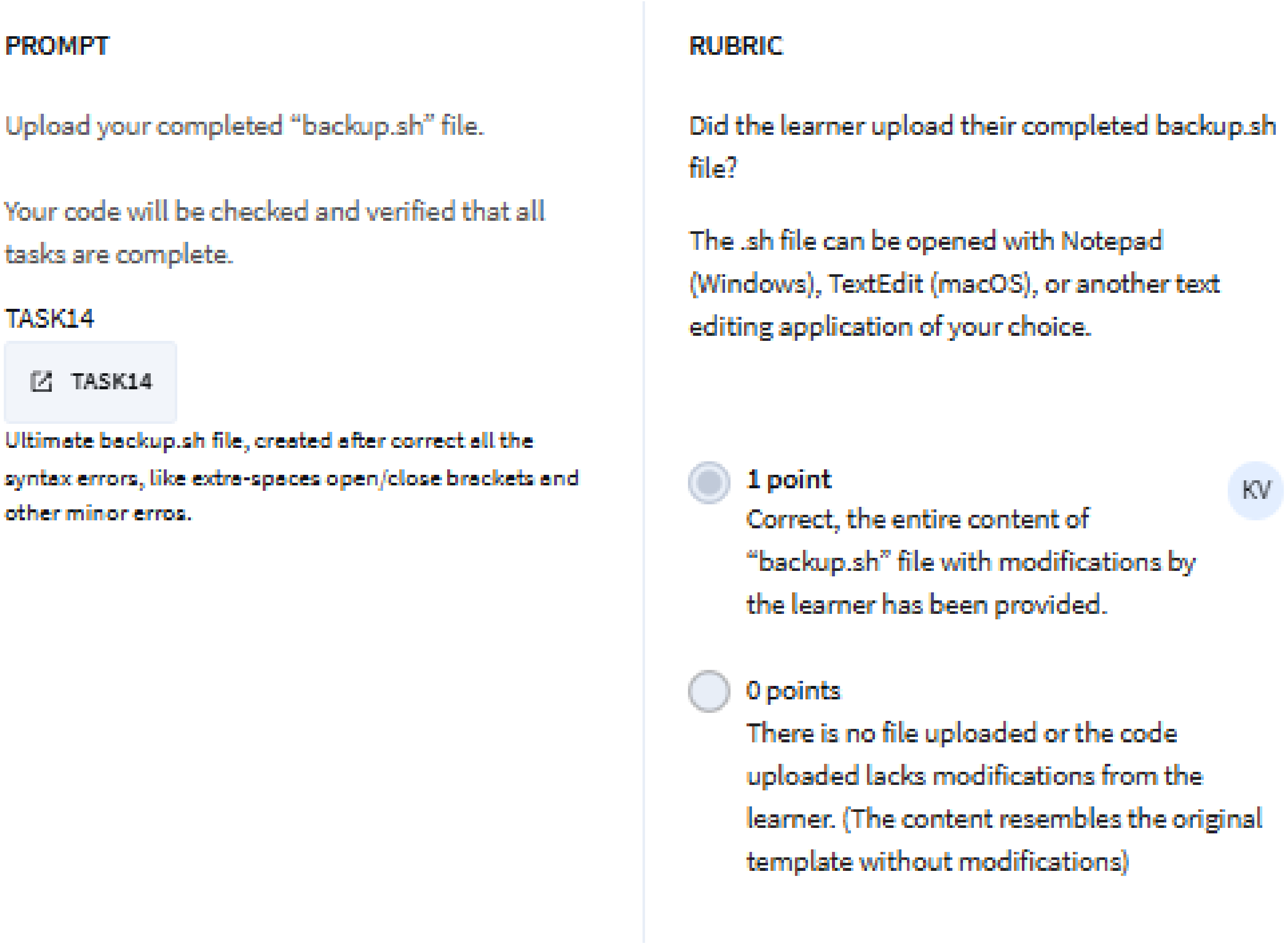
● **1 point** KV

Correct. You see the following code or similar that means the same:

```
mv $backupFileName $destAbsPath
```

○ 0 points

Incorrect. The code doesn't resemble the example and does something other than what is required.



PROMPT

Upload your completed "backup.sh" file.

Your code will be checked and verified that all tasks are complete.

TASK14

TASK14

Ultimate backup.sh file, created after correct all the syntax errors, like extra-spaces open/close brackets and other minor erros.

RUBRIC

Did the learner upload their completed backup.sh file?

The .sh file can be opened with Notepad (Windows), TextEdit (macOS), or another text editing application of your choice.

● **1 point**
Correct, the entire content of "backup.sh" file with modifications by the learner has been provided.

KV

○ 0 points
There is no file uploaded or the code uploaded lacks modifications from the learner. (The content resembles the original template without modifications)

PROMPT

Submit the screenshot titled "15-executable.png" (or .jpg, .jpeg).

This screenshot should show that your backup.sh file is executable.

TASK15

Save the backup.sh file and set the permission to read and write the file, also verify if the file was executable.

RUBRIC

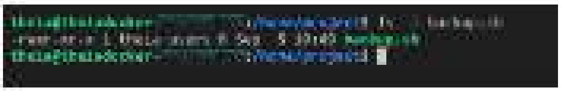
Did the learner upload the screenshot for Task 15 showing permissions for the backup.sh file?

TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).

○ **2 points**

KV

Correct. The learner's screenshot resembles the following output showing the file is executable:



```
theia@theiadocker-[illegible]:/home/project$ ls -l backup.sh
-rwxr-xr-x 1 theia users [illegible] backup.sh
theia@theiadocker-[illegible]:/home/project$
```

○ **0 points**

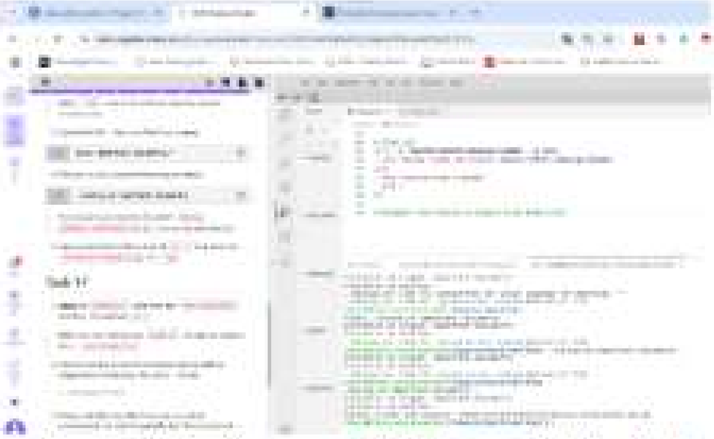
Incorrect.The screenshot doesn't contain any Xs or the learner didn't submit anything.

PROMPT

Submit a screenshot called “16-backup-complete.png (or .jpg, .jpeg)

Your screenshot should show the backupfile in the current directory with the correct name.

TASK16



Backup created with success, the file wesprinted with the backup-[CURRENT_TIMESTAMP].ter.gz the stamp was [1742523325]

RUBRIC

Did the learner upload the screenshot for Task 16 showing the backup file in the current directory with the correct name?

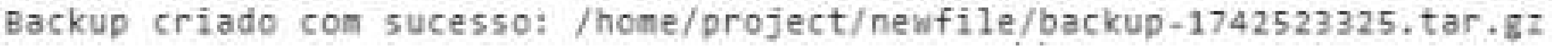
TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).

● **2 points** KV
Correct. The learner's screenshot contains a line showing the backed-up file:

Note: The number can be different **but should be larger than the one in the provided example**.

○ 1 point
Partially correct. The file is present but has an incorrect name.

○ 0 points
Incorrect. The screenshot doesn't resemble the example, is irrelevant, or isn't provided.



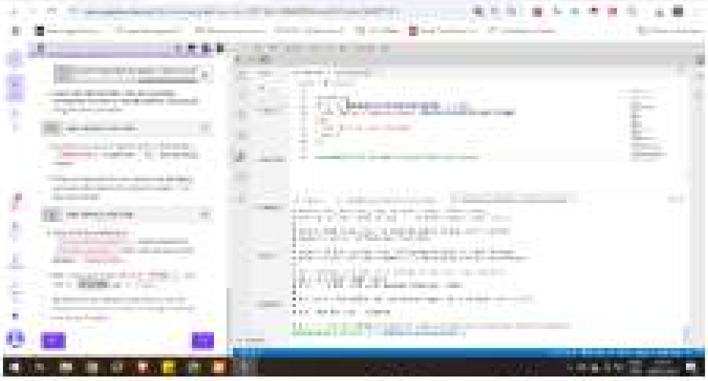
```
Backup criado com sucesso: /home/project/newfile/backup-1742523325.tar.gz
```

PROMPT

Submit the screenshot titled "17-crontab.png (or .jpg, .jpeg)

Your screenshot should show a crontab routine scheduled to run every 24 hours. (doesn't matter what time of day as long as it's every 24 hours)

TASK17



The Cron schedule was successfull executed with the command cron -e, editing the doc with the respective command line, after this, verifying with cron -l

RUBRIC

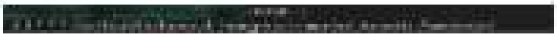
Did the learner upload the screenshot for Task 17 a crontab routine is scheduled to run every 24 hours?

TIP: If the screenshot appears small and is hard to read try zooming in by pressing "Ctrl" and "+" keys together (Mac: "Command" and "+"), or Right-click on the image and "View Image" (Firefox) or "Open Image in new Tab" (Chrome).

● **2 points**

KV

Correct. The output of "crontab-l"includesthe following line:



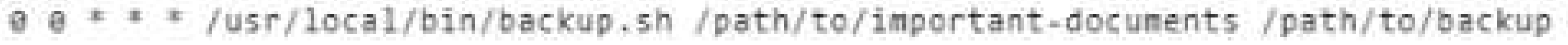
Note: The numbers don't need to both be 0, as long as they're valid minute and hour times (0-59, and 0-23)

○ 1 point

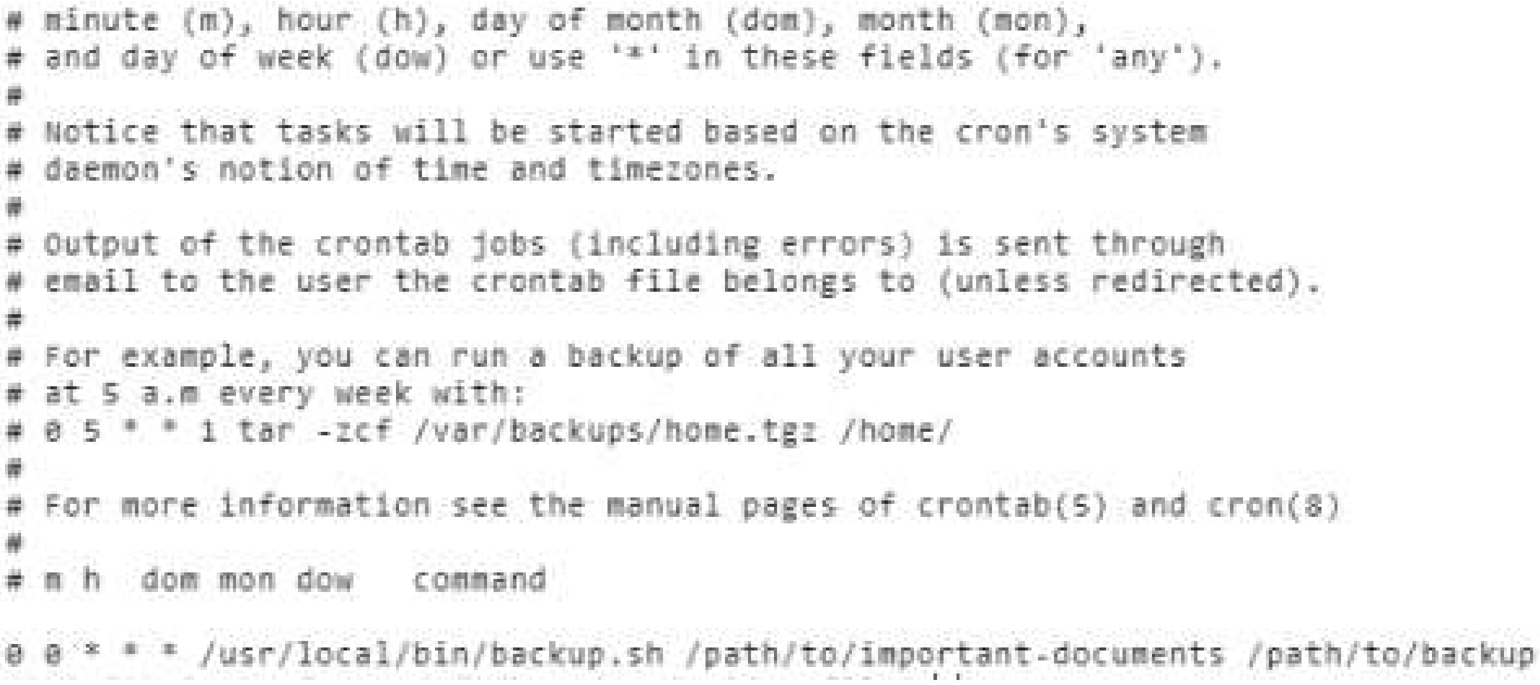
Partially correct. The screenshot shows a different schedule than every 24 hours.

○ 0 points

Incorrect. The screenshot doesn't resemble the example, is irrelevant, or isn't provided.



```
0 0 * * * /usr/local/bin/backup.sh /path/to/important-documents /path/to/backup
```



```
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command

0 0 * * * /usr/local/bin/backup.sh /path/to/important-documents /path/to/backup
```