

My Interview Scripts

Task 1: Write a bash script CreateDirectories.sh that when the script is executed with three given arguments (one is directory name and second is start number of directories and third is the end number of directories) it creates a specified number of directories with a dynamic directory name.

This script will create a series of directories with names that are formed by concatenating the value of the variable “\$1” with the values of the variable “\$i” as it iterates through a range of values specified by “\$2” and “\$3”.

The script uses a “for” loop to iterate through the range of values specified by “\$2” and “\$3”. The loop variable “\$i” is initialized to the value of “\$2”, and the loop continues until “\$i” is greater than “\$3”. The body of the loop creates a new directory using the “mkdir” command and the value of “\$1” concatenated with the value of “\$i”.

```

bhushan@ubuntu:~/Hardsoft/Task1$ touch directories.sh | chmod u+x directories.sh
chmod: cannot access 'directories.sh': No such file or directory
bhushan@ubuntu:~/Hardsoft/Task1$ touch directories.sh
bhushan@ubuntu:~/Hardsoft/Task1$ chmod u+x directories.sh
bhushan@ubuntu:~/Hardsoft/Task1$ vi directories.sh
bhushan@ubuntu:~/Hardsoft/Task1$ ./directories.sh
./directories.sh: line 3: ((: i=: syntax error: operand expected (error token is "=")
bhushan@ubuntu:~/Hardsoft/Task1$ vi directories.sh
bhushan@ubuntu:~/Hardsoft/Task1$ vi directories.sh dir 1 20
4 files to edit
bhushan@ubuntu:~/Hardsoft/Task1$ ./directories.sh dir 1 20
bhushan@ubuntu:~/Hardsoft/Task1$ ls
dir1 dir10 dir11 dir12 dir13 dir14 dir15 dir16 dir17 dir18 dir19 dir2 dir20 dir3 dir4 dir5 dir6 dir7 dir8 dir9 directories.sh
bhushan@ubuntu:~/Hardsoft/Task1$ cat directories.sh
#!/bin/bash

for ((i=$2;i<=$3;i++))
do
    mkdir $1$i
done
bhushan@ubuntu:~/Hardsoft/Task1$

```

Task 2: Create a Script to backup all your work done till now.

This script sets the current date and time, sets the directories for the backup and the work to be backed up and creates the backup file using the “tar” command. The “tar” command creates a gzipped tar archive of the work directory and stores it in the specified backup file. Finally, the script prints a message indicating that the backup is complete.

- c : Creates Archive
- x : Extract the archive
- f : creates archive with given filename
- t : displays or lists files in archive file
- u : archives and adds to an existing archive file
- v : Displays Verbose Information
- A : Concatenates the archive files
- z : zip, tells tar command that creates tar file using gzip
- j : filter archive tar file using tbzip
- W : Verify a archive file

-r : update or add file or directory in already existed .tar file

```
bhushan@ubuntu:~/Hardsoft/Task1$ vi backup_file.sh
bhushan@ubuntu:~/Hardsoft/Task1$ chmod u+x backup_file.sh
bhushan@ubuntu:~/Hardsoft/Task1$ ./backup_file.sh
tar: Removing leading '/' from member names
tar (child): /home/bhushan/Hardsoft/Task2/work_backup_2023-03-06_21-34-07.tar.gz: Cannot open: No such file or directory
tar (child): Error is not recoverable: exiting now
/home/bhushan/Hardsoft/
/home/bhushan/Hardsoft/calculator.sh
/home/bhushan/Hardsoft/file2.sh
/home/bhushan/Hardsoft/file5.txt
/home/bhushan/Hardsoft/Task1/
/home/bhushan/Hardsoft/Task1/dir7/
/home/bhushan/Hardsoft/Task1/dir4/
/home/bhushan/Hardsoft/Task1/dir19/
/home/bhushan/Hardsoft/Task1/directories.sh
/home/bhushan/Hardsoft/Task1/dir10/
/home/bhushan/Hardsoft/Task1/dir9/
/home/bhushan/Hardsoft/Task1/backup_file.sh
/home/bhushan/Hardsoft/Task1/dir20/
/home/bhushan/Hardsoft/Task1/dir5/
tar: /home/bhushan/Hardsoft/Task2/work_backup_2023-03-06_21-34-07.tar.gz: Cannot write: Broken pipe
tar: Child returned status 2
tar: Error is not recoverable: exiting now
Backup complete: /home/bhushan/Hardsoft/Task2/work_backup_2023-03-06_21-34-07.tar.gz
bhushan@ubuntu:~/Hardsoft/Task1$ cat backup_file.sh
#!/bin/bash

# Set the current date and time
date=$(date +%Y-%m-%d_%H-%M-%S)

# Set the directory where the backup will be stored
backup_dir="/home/bhushan/Hardsoft/Task2"

# Set the directory that contains the work to be backed up
work_dir="/home/bhushan/Hardsoft/"

# Create the name of the backup file
backup_file="$backup_dir/work_backup_$date.tar.gz"

# Create the backup
tar -czvf $backup_file $work_dir

echo "Backup complete: $backup_file"
bhushan@ubuntu:~/Hardsoft/Task1$
```