

1. Write a bash script named createDirectories.sh that, when executed with three arguments (directory name, start number, and end number), creates a specified number of directories with dynamically named directories from start number to end number. For example, executing ./createDirectories.sh day 1 90 . Similarly, if executed as ./createDirectories.sh Movie 20 50, it should create 50 directories named Movie20, Movie21, ..., Movie50."

```
#!/bin/bash

echo "Starting the process of creating directories..."

# Assigning command line arguments to variables
Firstargument=$1
Secondargument=$2
Thirdargument=$3

# Loop to create directories from start number to end number
for (( i=$Secondargument; i<=$Thirdargument; i++ ))
do
    mkdir -p "$Firstargument$i"
done

echo "Directories created. Please check."
```

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

All the Scripts which I wrote are stored in the Scripts directory.
So I am taking backup of that directory.

```
#!/bin/bash

function create_Backup {

src_dir="/home/ec2-user/TrainwithShubham/Madhuri/linux/Scripts"
tgt_dir="/Backup"

current_timestamp=$(date "+%Y-%m-%d-%H-%M-%S")
```

```
final_file=$tgt_dir/scripts-backup-$current_timestamp.tgz
```

```
tar czf "$final_file" -C "$src_dir" .
```

```
}
```

```
echo "Starting Backup Process"
```

```
create_Backup
```

```
echo "Backup is completed...."
```

3. Automate the Backup Script using Cron.

Cron is a system scheduler for running tasks automatically. Users interact with cron using a command called crontab, which lets them add, edit, or remove scheduled tasks. A crontab file is where users specify the scheduling details for their tasks.

If the cron service is not installed on your system, you won't be able to use cron to schedule tasks. You need to install the cron package before you start using it.

For Red Hat-based systems like CentOS or Red Hat Enterprise Linux (RHEL), here are the commands:

```
sudo yum install cronie -y
```

```
sudo systemctl enable crond
```

```
sudo systemctl start crond
```

These commands install the cronie package, enable the crond service (which is the cron service on Red Hat-based systems) to start automatically on boot, and then start the crond service immediately.

Check the status of the service by using below command

```
sudo systemctl status crond
```

If it is active and running then To schedule a backup task every 6 hours, use crontab -e
0 */6 * * * /home/ec2-user/TrainwithShubham/Madhuri/linux/Scripts/backup.sh
Check scheduled tasks with crontab -l

4.Create 2 users and just display their Usernames

```
sudo useradd -m Vardhan && sudo useradd -m Krishna && echo "Usernames: Vardhan,  
Krishna"
```