

Unit 1.1: Graded Assignment: Rsync

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Assignment:

On a linux server setup a cron job for copying example data with rsync periodically.

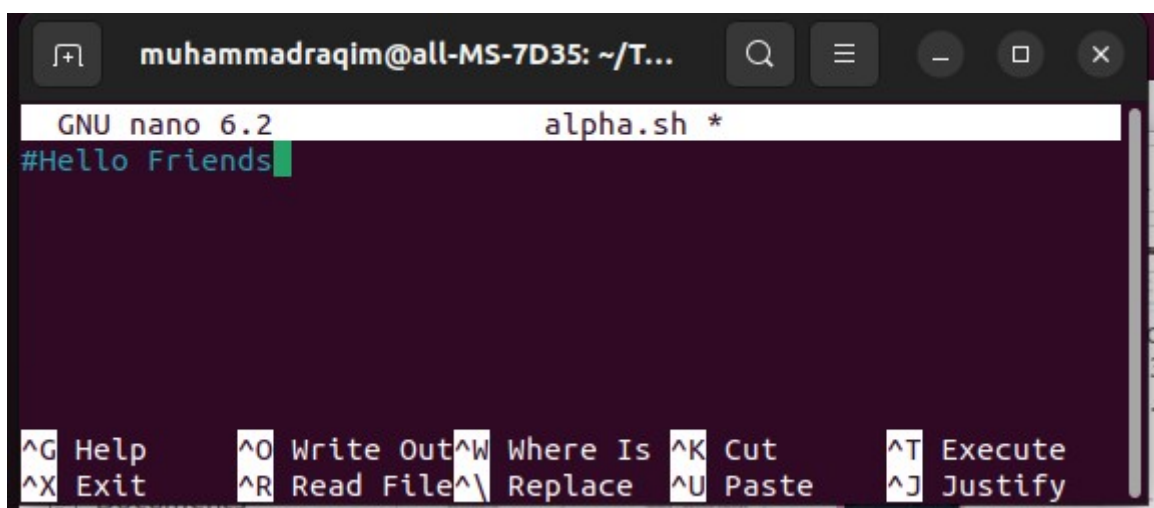
Ensure the copying is handled in the background and independently of the user session.

Solution:

We open terminal and created a file named "alpha.sh" using nano command

```
muhammadrqim@all-MS-7D35:~/Templates$ nano alpha.sh
```

And wrote a demo text on "alpha.sh"



```
muhammadrqim@all-MS-7D35: ~/T...
GNU nano 6.2 alpha.sh *
#Hello Friends
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify
```

To create or edit a crontab file we passed the command:

```
muhammadrqim@all-MS-7D35:~$ crontab -e
```

In the file, We added the rsync command for copying the data. As we want to copy a file named `/home/muhammadrqim/alpha.sh` to another location that is `/home/muhammadrqim/Templates/`. We also specified the schedule for running the command, as mentioned manner:

```
# _____ minute (0 - 59)
# _____ hour (0 - 23)
# _____ day of the month (1 - 31)
# _____ month (1 - 12)
# _____ day of the week (0 - 6) (Sunday to Saturday;
#                                     7 is also Sunday on some systems)
#
# * * * * * command to execute
```

Figure 1: Reference: https://www.hostinger.com/tutorials/cron-job?ppc_campaign=google_search_generic_hosting_all&bidkw=defaultkeyword&lo=1011081&gclid=Cj0KCQjw8qmhBhClARIsANAtboeiMrnahlOFpXY-ObomdRESRuljTAoJGvv4ev0hHZFuVigaQdglBM0aAlNdEALw_wcB

As we want it to perform backup in every 1 minute

```

GNU nano 6.2 /tmp/crontab.vBKdT4/crontab
# Edit this file to introduce tasks to be run by cron.
#
# Each task has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# 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
1 * * * * rsync -a /path/to/Home/my_backup_script.sh /path/to/Home/Templates
1 * * * * rsync -a /home/muhammadrqim/alpha.sh /home/muhammadrqim/Templates/

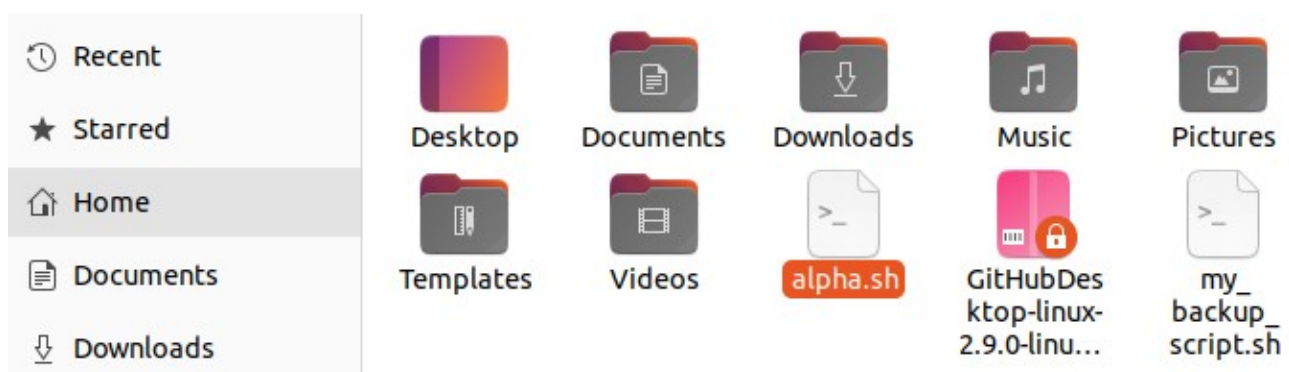
```

Wrote 27 lines

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location	M-U Undo	M-A Set Mark
^X Exit	^R Read File	^_ Replace	^U Paste	^J Justify	^/_ Go To Line	M-E Redo	M-6 Copy

It will automatically copy “alpha.sh” from Home folder path to the Templates folder in every 1 minute. And beauty of crontab is, it will copy only the modification performed on the “alpha.sh” in Home folder.

```
/home/muhammadrqim/alpha.sh
```



```
/home/muhammadrqim/Templates/
```

