Unit 1.1 Graded Assignment: RSYNC

Instructions:

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.

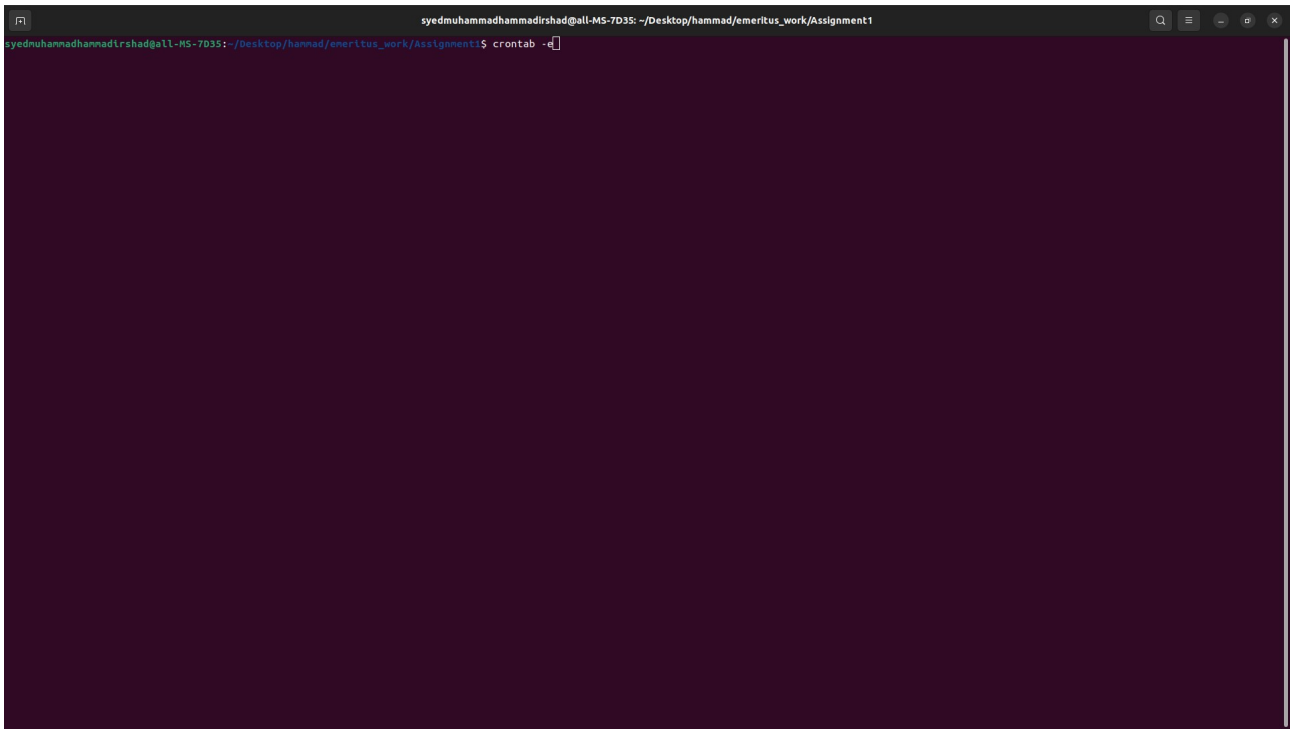
Submitted By:

1. **Ali Nasir (2303.KHI.DEG.012)**
2. **Syed Muhammad Hammad Irshad (2303.KHI.DEG.032)**

Solution:

In this assignment we have implemented cron job with rsync which backups all the data after every minute. As per our understanding Cron job is used to automate the repetitive task through linux terminal. As far as rysnc is concern it is used to compile, backup, copy files from one directory to another. We have implemented both in this assignment. The screenshot describe below shows our understanding and implementation.

1. First we write crontab -e to enter cron job terminal.

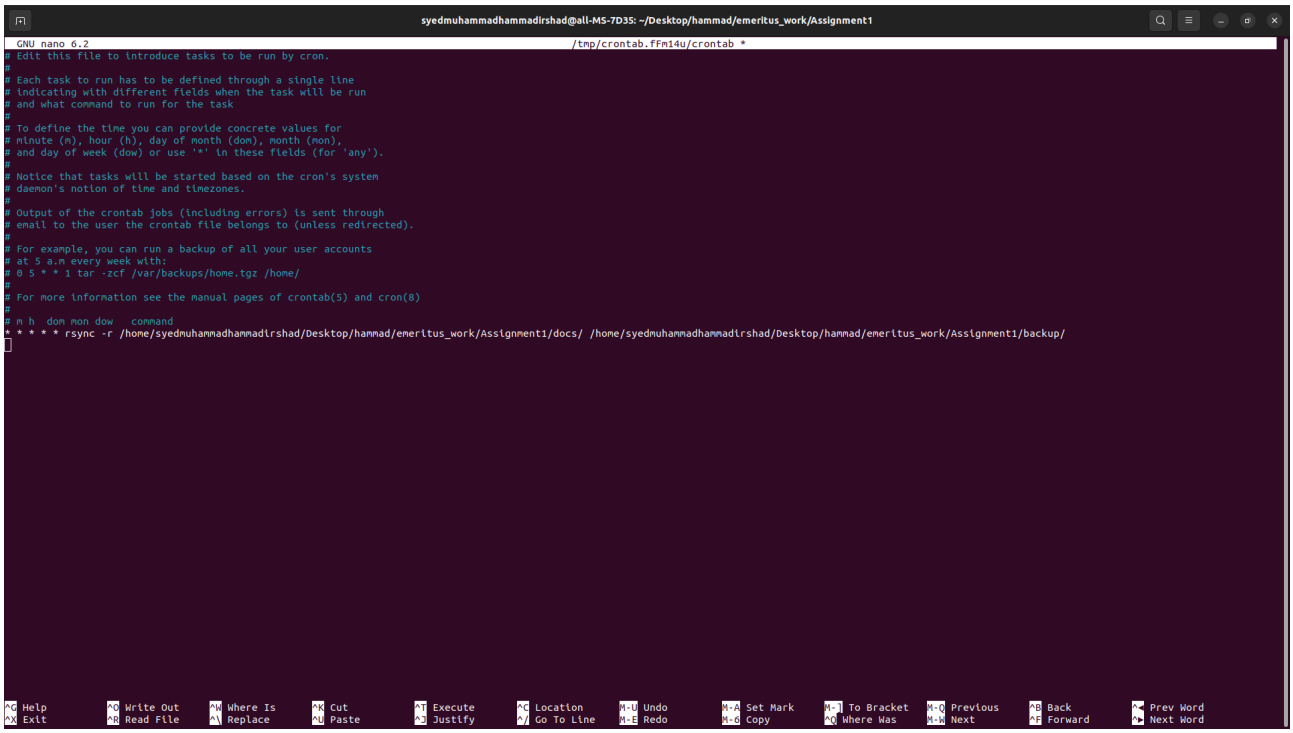


2. In the cron tab terminal we have written the rsync command i.e.

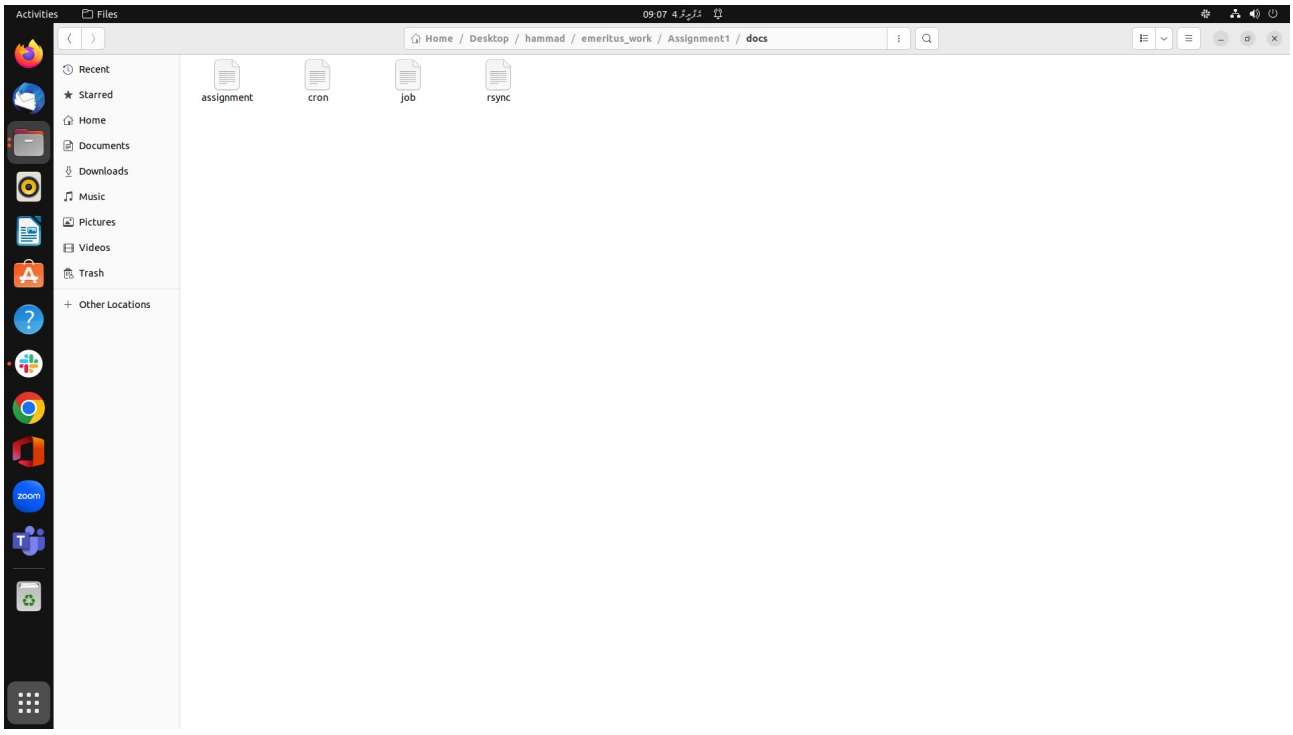
   *** * * * * rsync -r /home/syedmuhammadhammadirshad/Desktop/hammad/emeritus_work/Assignment1/docs/ /home/syedmuhammadhammadirshad/Desktop/hammad/emeritus_work/Assignment1/backup/**

   Where,
   - * * * * * = shows that this task will run after every minute.

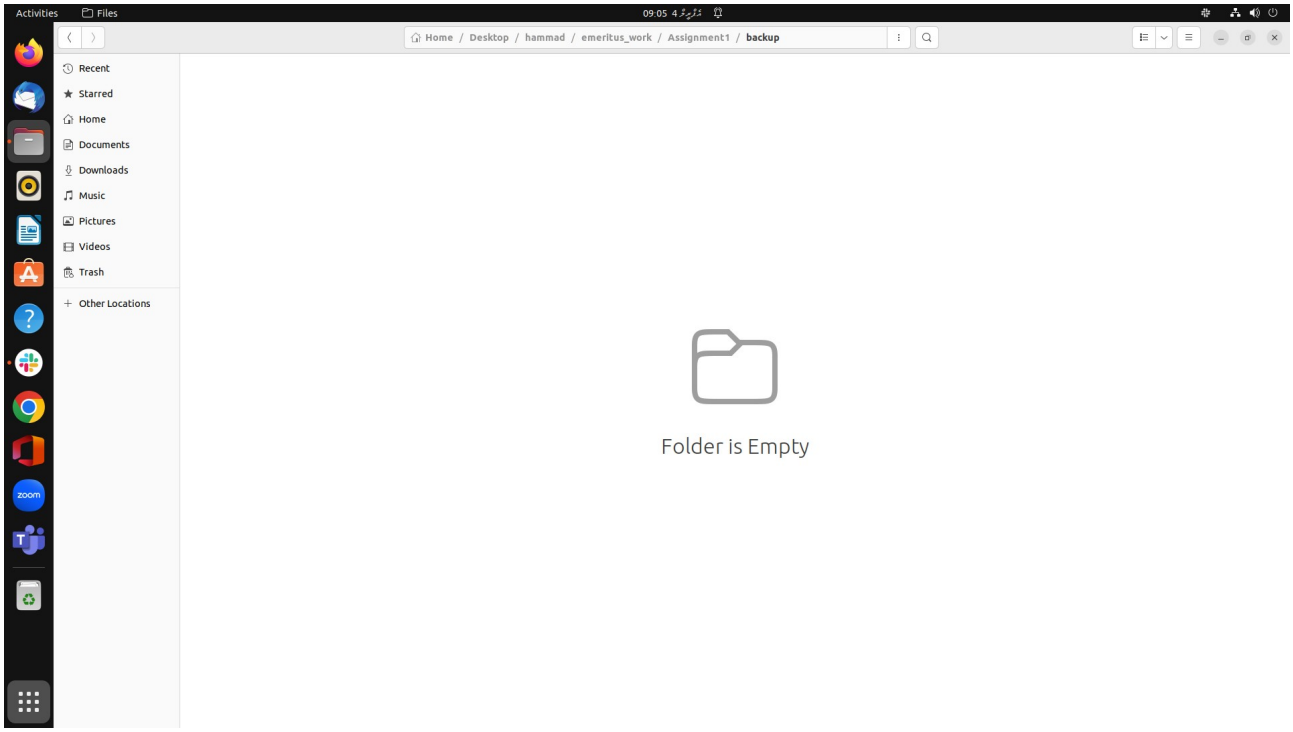
- Rsync = it is the conventional statement to implement rsync functionality.
- - r = this will recursively copy the directory as well as sub directory to our destination directory.
- /home/syedmuhammadhammadirshad/Desktop/hammad/emeritus_work/Assignment1/docs/ = is our source directory
- /home/syedmuhammadhammadirshad/Desktop/hammad/emeritus_work/Assignment1/backup/ = Thsi is the location of our destination directory.



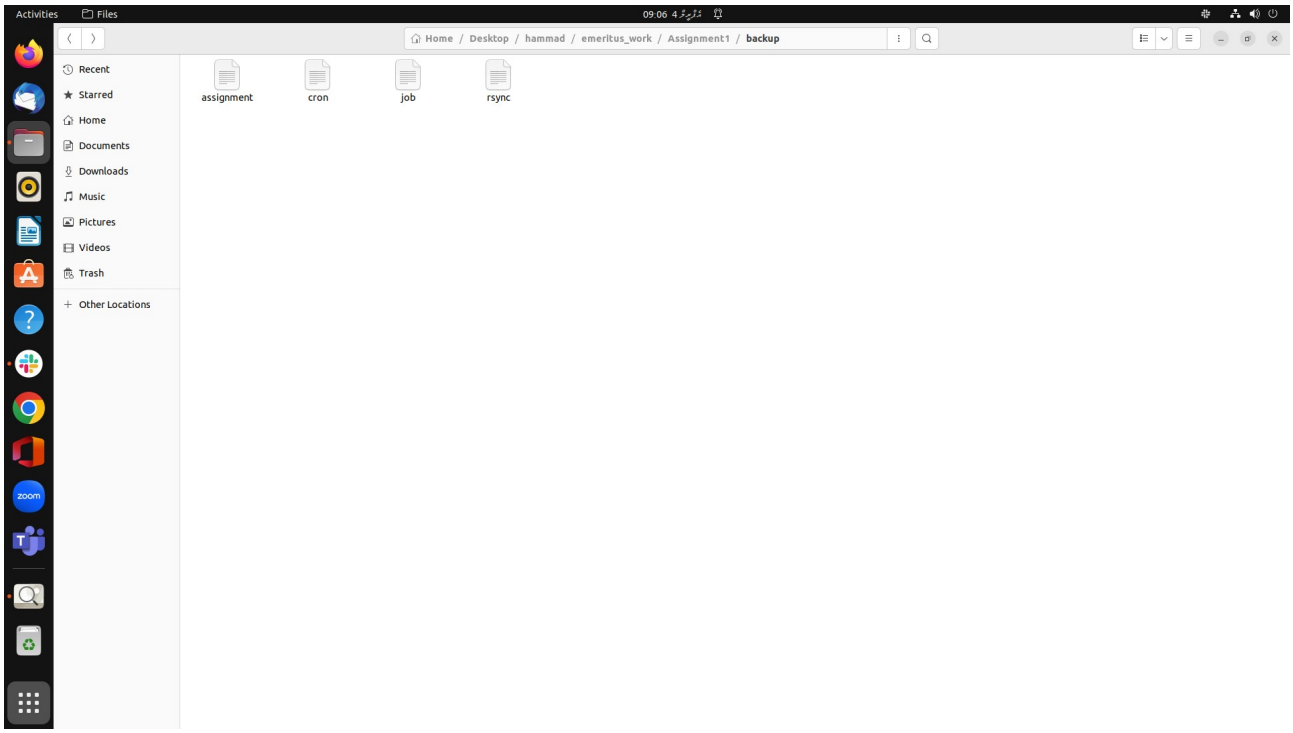
3. After 1 minute we can see that the files are transferred from source to destination directory.This is the source directory where we have stored text files.



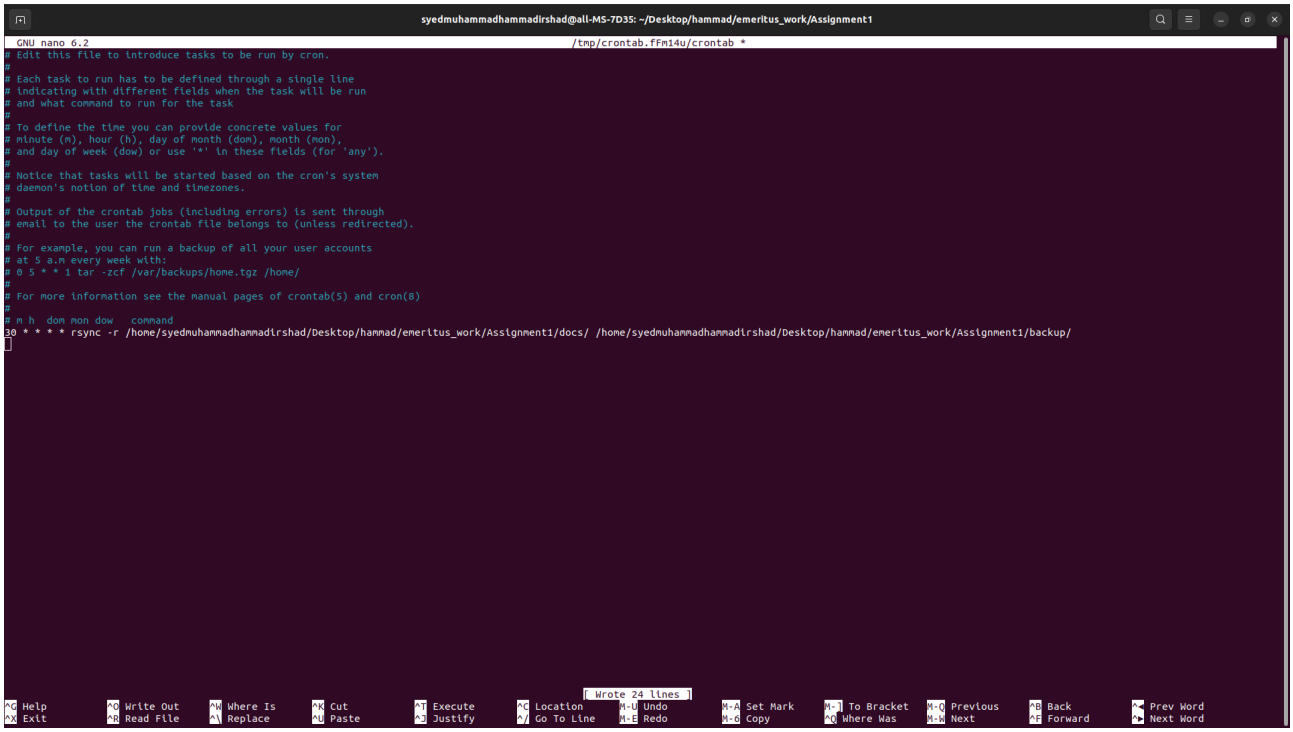
This is our backup directory before cron job was run



This is our backup directory after our cron job was run



Furthermore, we have implemented the rsync command on different timestamp.
This cron job will run after every 30 minutes



This cron job will run after every 10 minutes.