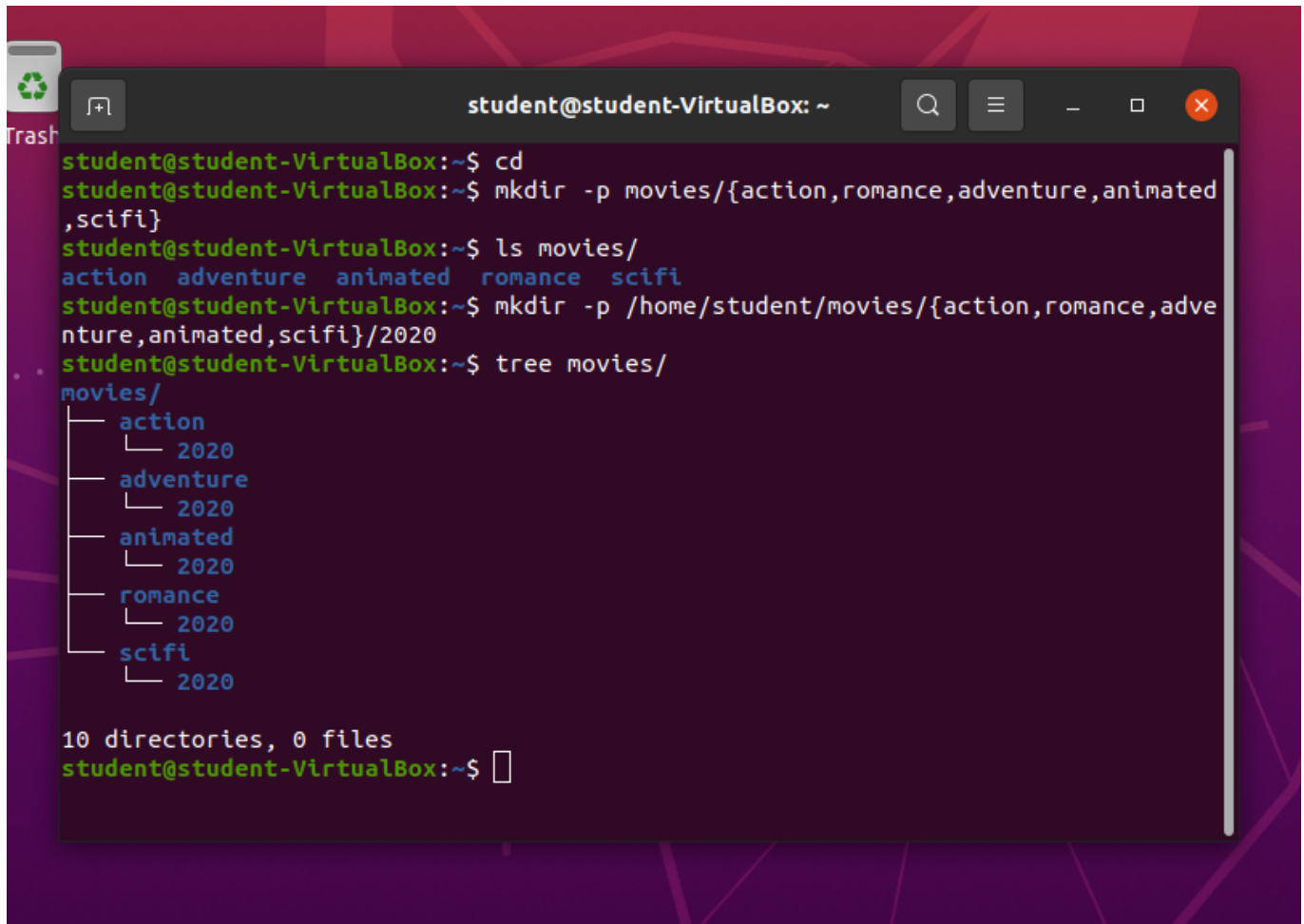


Lab 4 | Managing files and directories

Question 1: Creating directories

A terminal window titled 'student@student-VirtualBox: ~' with standard window controls. The terminal shows a series of commands to create a directory structure for movies. The 'mkdir' command is used to create a 'movies' directory and subdirectories for 'action', 'romance', 'adventure', 'animated', and 'scifi'. Then, another 'mkdir' command is used to create a '2020' subdirectory within each of these categories. The 'ls' command is used to verify the creation of the main categories. Finally, the 'tree' command is used to display the full directory structure, showing 'movies/' as the root with five subdirectories, each containing a '2020' subdirectory. The output indicates that 10 directories were created and 0 files exist.

```
student@student-VirtualBox:~$ cd
student@student-VirtualBox:~$ mkdir -p movies/{action,romance,adventure,animated,scifi}
student@student-VirtualBox:~$ ls movies/
action  adventure  animated  romance  scifi
student@student-VirtualBox:~$ mkdir -p /home/student/movies/{action,romance,adventure,animated,scifi}/2020
student@student-VirtualBox:~$ tree movies/
movies/
├── action
│   └── 2020
├── adventure
│   └── 2020
├── animated
│   └── 2020
├── romance
│   └── 2020
└── scifi
    └── 2020

10 directories, 0 files
student@student-VirtualBox:~$
```

Question 2: Creating files

```

student@student-VirtualBox: /
student@student-VirtualBox:~$ cd movies/
student@student-VirtualBox:~/movies$ ls
action  adventure  animated  romance  scifi
student@student-VirtualBox:~/movies$ touch {action,adventure,animated,romance,scifi}/moviesList.txt
student@student-VirtualBox:~/movies$ tree
.
├── action
│   ├── 2020
│   └── moviesList.txt
├── adventure
│   ├── 2020
│   └── moviesList.txt
├── animated
│   ├── 2020
│   └── moviesList.txt
├── romance
│   ├── 2020
│   └── moviesList.txt
└── scifi
    ├── 2020
    └── moviesList.txt

10 directories, 5 files
student@student-VirtualBox:~/movies$ touch /home/student/movies/{action,adventure,animated,romance,scifi}/new.doc
student@student-VirtualBox:~/movies$ touch /home/student/movies/{action,adventure,animated,romance,scifi}/old.pdf
student@student-VirtualBox:~/movies$ cd /
student@student-VirtualBox:/$ ls -l -R -t -i -g -G home/student/movies/
home/student/movies/:
total 20
2624646 drwxrwxr-x 3 4096 Nov  9 22:49 action
2624648 drwxrwxr-x 3 4096 Nov  9 22:49 adventure

student@student-VirtualBox:~/movies$ touch /home/student/movies/{action,adventure,animated,romance,scifi}/new.doc
student@student-VirtualBox:~/movies$ touch /home/student/movies/{action,adventure,animated,romance,scifi}/old.pdf
student@student-VirtualBox:~/movies$ cd /
student@student-VirtualBox:/$ ls -l -R -t -i -g -G home/student/movies/
home/student/movies/:
total 20
2624646 drwxrwxr-x 3 4096 Nov  9 22:49 action
2624648 drwxrwxr-x 3 4096 Nov  9 22:49 adventure
2624649 drwxrwxr-x 3 4096 Nov  9 22:49 animated
2624647 drwxrwxr-x 3 4096 Nov  9 22:49 romance
2624650 drwxrwxr-x 3 4096 Nov  9 22:49 scifi

home/student/movies/action:
total 4
2624666 -rw-rw-r-- 1 0 Nov  9 22:49 old.pdf
2624661 -rw-rw-r-- 1 0 Nov  9 22:49 new.doc
2624656 -rw-rw-r-- 1 0 Nov  9 22:46 moviesList.txt
2624651 drwxrwxr-x 2 4096 Nov  9 22:39 2020

home/student/movies/action/2020:
total 0

home/student/movies/adventure:
total 4
2624667 -rw-rw-r-- 1 0 Nov  9 22:49 old.pdf
2624662 -rw-rw-r-- 1 0 Nov  9 22:49 new.doc
2624657 -rw-rw-r-- 1 0 Nov  9 22:46 moviesList.txt
2624653 drwxrwxr-x 2 4096 Nov  9 22:39 2020

home/student/movies/adventure/2020:
total 0

home/student/movies/animated:
total 4
2624668 -rw-rw-r-- 1 0 Nov  9 22:49 old.pdf
2624663 -rw-rw-r-- 1 0 Nov  9 22:49 new.doc
2624658 -rw-rw-r-- 1 0 Nov  9 22:46 moviesList.txt
2624654 drwxrwxr-x 2 4096 Nov  9 22:39 2020

home/student/movies/animated/2020:
total 0

home/student/movies/romance:
total 4
2624669 -rw-rw-r-- 1 0 Nov  9 22:49 old.pdf
2624664 -rw-rw-r-- 1 0 Nov  9 22:49 new.doc
2624659 -rw-rw-r-- 1 0 Nov  9 22:46 moviesList.txt
2624652 drwxrwxr-x 2 4096 Nov  9 22:39 2020

```

```

home/student/movies/romance/2020:
total 0

home/student/movies/scifi:
total 4
2624670 -rw-rw-r-- 1  0 Nov  9 22:49 old.pdf
2624665 -rw-rw-r-- 1  0 Nov  9 22:49 new.doc
2624660 -rw-rw-r-- 1  0 Nov  9 22:46 moviesList.txt
2624655 drwxrwxr-x 2 4096 Nov  9 22:39 2020

home/student/movies/scifi/2020:
total 0
student@student-VirtualBox:/$

```

Question 3: Removing files

```

student@student-VirtualBox:/$ cd /usr/share/
student@student-VirtualBox:/usr/share$ ls /home/student/movies/
action  adventure  animated  romance  scifi
student@student-VirtualBox:/usr/share$ rm /home/student/movies/{action,adventure,animated,romance,scifi}/{new.doc,old.pdf}
student@student-VirtualBox:/usr/share$ rm /home/student/movies/
rm: cannot remove '/home/student/movies/': Is a directory
student@student-VirtualBox:/usr/share$ tree /home/student/movies/
/home/student/movies/
├── action
│   ├── 2020
│   └── moviesList.txt
├── adventure
│   ├── 2020
│   └── moviesList.txt
├── animated
│   ├── 2020
│   └── moviesList.txt
├── romance
│   ├── 2020
│   └── moviesList.txt
└── scifi
    ├── 2020
    └── moviesList.txt

10 directories, 5 files

```

```

student@student-VirtualBox:/usr/bin$ cd /usr/bin/
student@student-VirtualBox:/usr/bin$ rm -r /home/student/movies/{action,adventure,animated,romance,scifi}
student@student-VirtualBox:/usr/bin$ tree /home/student/movies/
/home/student/movies/

0 directories, 0 files
student@student-VirtualBox:/usr/bin$ cd
student@student-VirtualBox:~$ rm -r movies/
student@student-VirtualBox:~$ ls
CIS-106 Desktop Documents Downloads exa_0.9.0-4_and64.deb.1 Music Pictures Public snap Templates Videos website.html
student@student-VirtualBox:~$

```

Question 4: Moving files and directories

```

student@student-VirtualBox:~$ mkdir -p movies/{action,adventure,romance,animated,scifi}
student@student-VirtualBox:~$ ls movies/
action  adventure  animated  romance  scifi
student@student-VirtualBox:~$ cd /
student@student-VirtualBox:/$ ls /home/student/Downloads/
Bad_Bunny_-_Yonaguni_thinknews.com.ng.mp3  music1.mp3  music3.mp3  pexel-img2.jpg  pexel-img4.jpg  pexelvid1  pexelvid3
cat1.jpeg  music2.mp3  pexel-img1.jpg  pexel-img3.jpg  pexel-img5.jpg  pexelvid2  rarlinux-x64-6.0.2.tar.gz
student@student-VirtualBox:/$ mv /home/student/Downloads/pexel-img1.jpg /home/student/movies/action/action.png
student@student-VirtualBox:/$ mv /home/student/Downloads/pexel-img2.jpg /home/student/movies/adventure/adventure.png
student@student-VirtualBox:/$ mv /home/student/Downloads/pexel-img3.jpg /home/student/movies/animated/animated.png
student@student-VirtualBox:/$ mv /home/student/Downloads/pexel-img4.jpg /home/student/movies/romance/romance.png
student@student-VirtualBox:/$ mv /home/student/Downloads/pexel-img5.jpg /home/student/movies/scifi/scifi.png
student@student-VirtualBox:/$ tree /home/student/movies/
/home/student/movies/
├── action
│   └── action.png
├── adventure
│   └── adventure.png
├── animated
│   └── animated.png
├── romance
│   └── romance.png
└── scifi
    └── scifi.png

5 directories, 5 files
student@student-VirtualBox:/$

```

Question 5: Copying files

```

student@student-VirtualBox:~$ cd
student@student-VirtualBox:~$ cp movies/ Videos/ -r
student@student-VirtualBox:~$ ls Videos/
movies
student@student-VirtualBox:~$ ls Do
Documents/ Downloads/
student@student-VirtualBox:~$ ls Downloads/
Bad_Bunny_-_Yonaguni_thinknews.com.ng.mp3  cat1.jpeg  music1.mp3  music2.mp3  music3.mp3  pexelvid1  pexelvid2  pexelvid3  rarlinux-x64-6.0.2.tar.gz
student@student-VirtualBox:~$ cp Downloads/music?.mp3 Music/
student@student-VirtualBox:~$ ls Music/
music1.mp3  music2.mp3  music3.mp3
student@student-VirtualBox:~$ ls Downloads/
Bad_Bunny_-_Yonaguni_thinknews.com.ng.mp3  cat1.jpeg  music1.mp3  music2.mp3  music3.mp3  new-vid.avi  rarlinux-x64-6.0.2.tar.gz  video1.mp4  video2.mkv
student@student-VirtualBox:~$ ls Downloads/*.{mp4,nkv,avi}
Downloads/new-vid.avi  Downloads/video1.mp4  Downloads/video2.mkv
student@student-VirtualBox:~$ cp Downloads/*.{mp4,nkv,avi} Videos/
student@student-VirtualBox:~$ tree Videos/
Videos/
├── movies
│   ├── action
│   │   └── action.png
│   ├── adventure
│   │   └── adventure.png
│   ├── animated
│   │   └── animated.png
│   ├── romance
│   │   └── romance.png
│   └── scifi
│       └── scifi.png
├── new-vid.avi
├── video1.mp4
└── video2.mkv

6 directories, 8 files
student@student-VirtualBox:~$

```