Name : Muhammad Ammanullah

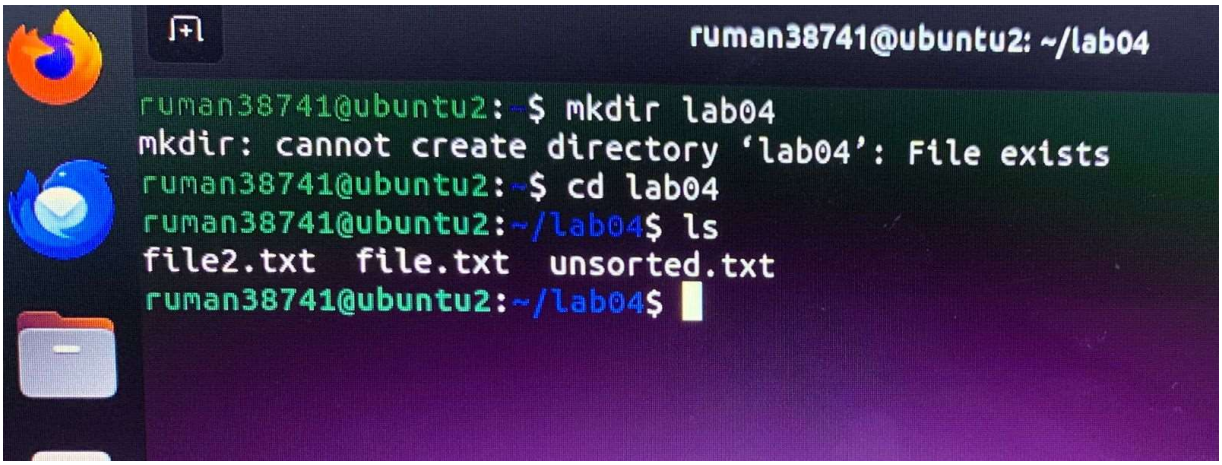
Sap I`d : 55633

Section : BS SE (5 – 2)

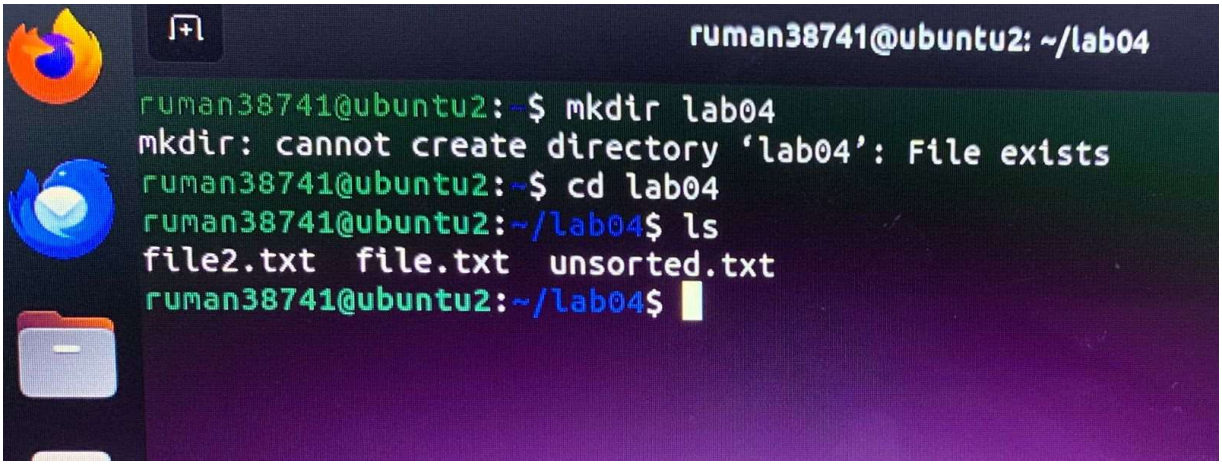
Course : Operating System Lab

Lab 4 Tasks:

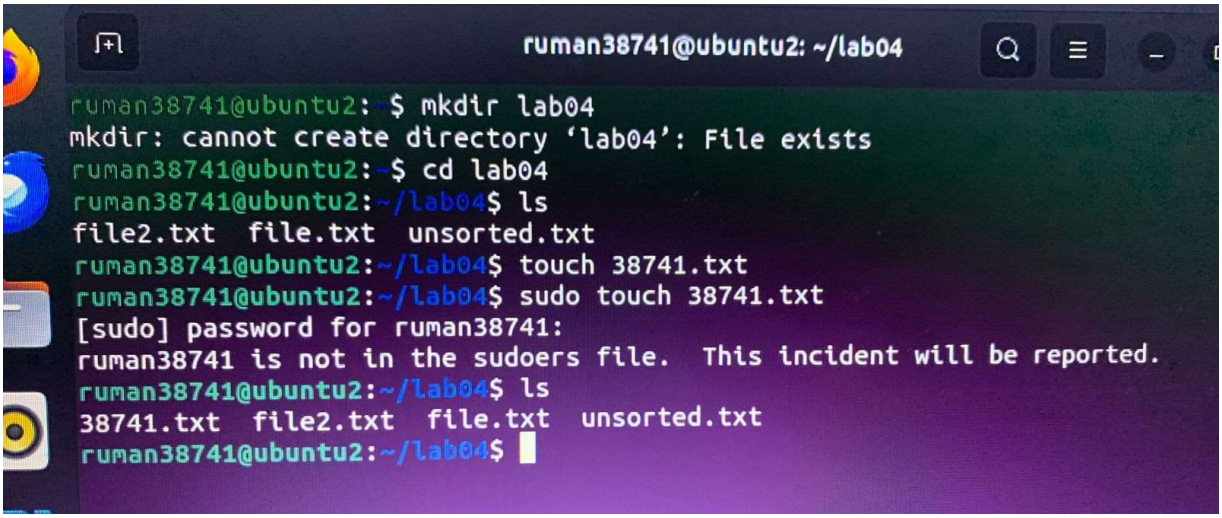
Tasks 1:



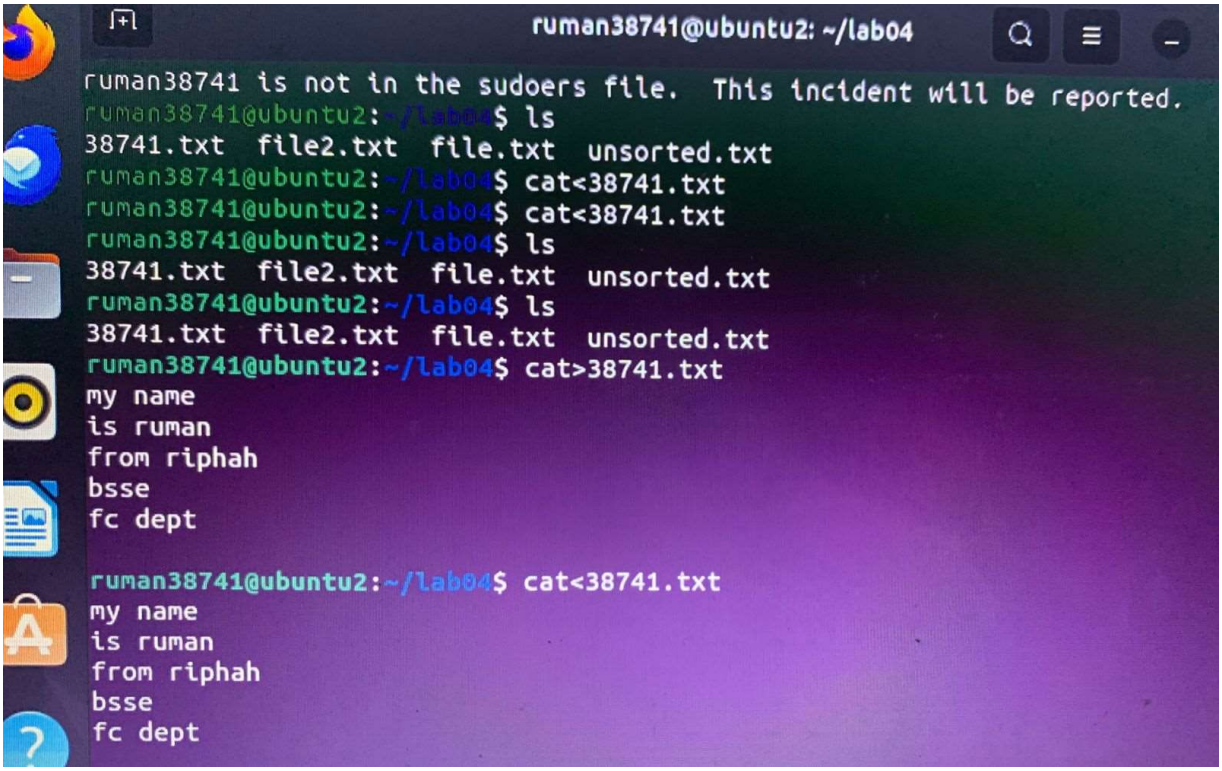
Tasks 2:



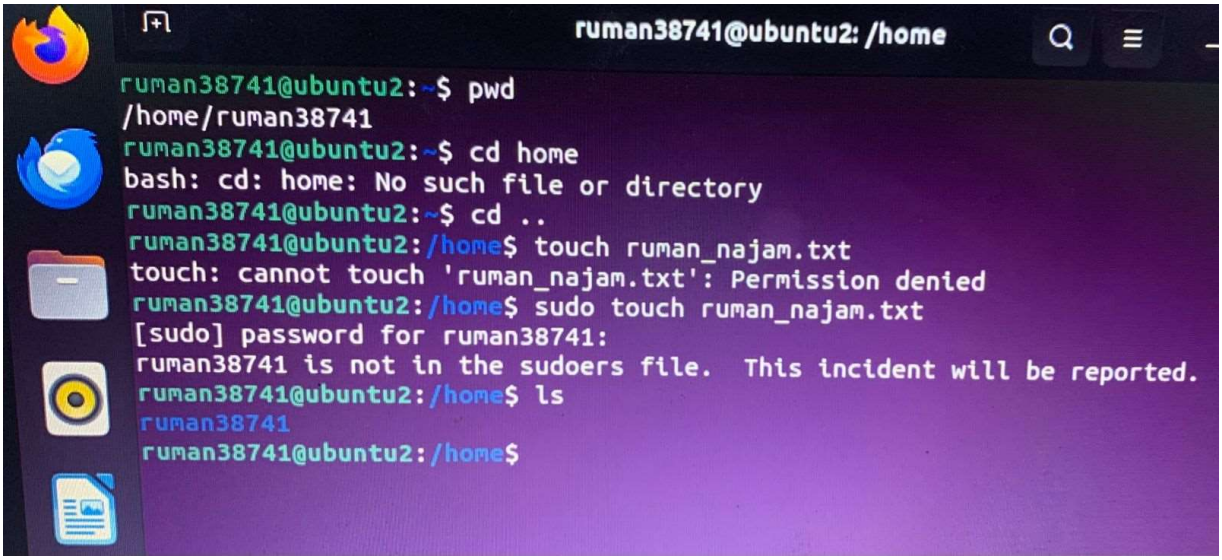
Tasks 3:



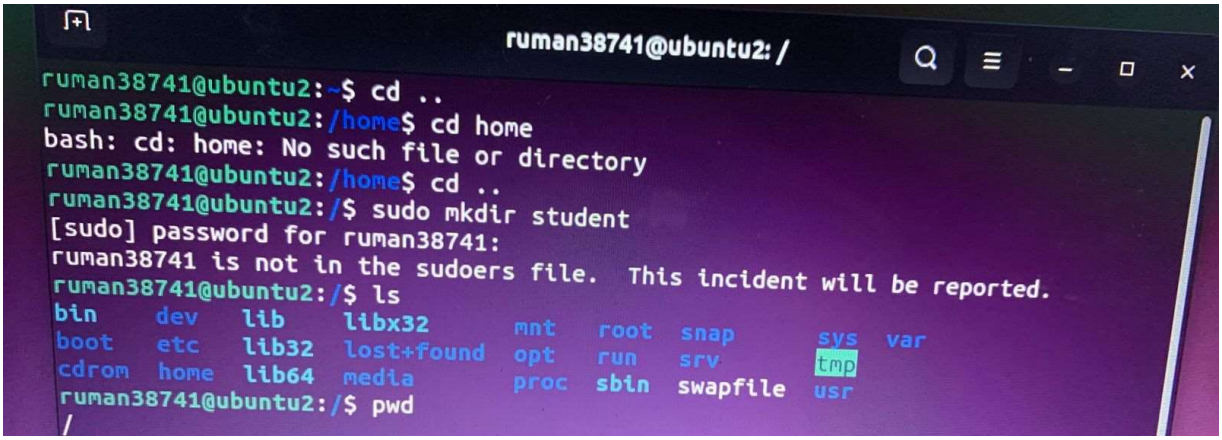
Tasks 4:



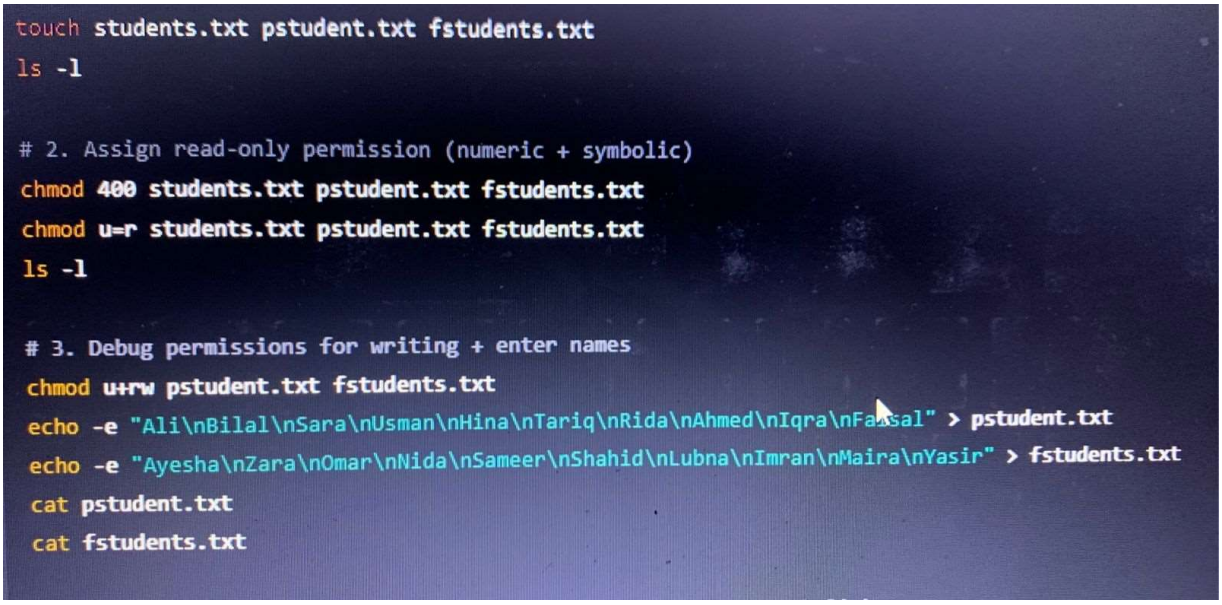
Tasks 5:



Tasks 6:



Tasks 7:

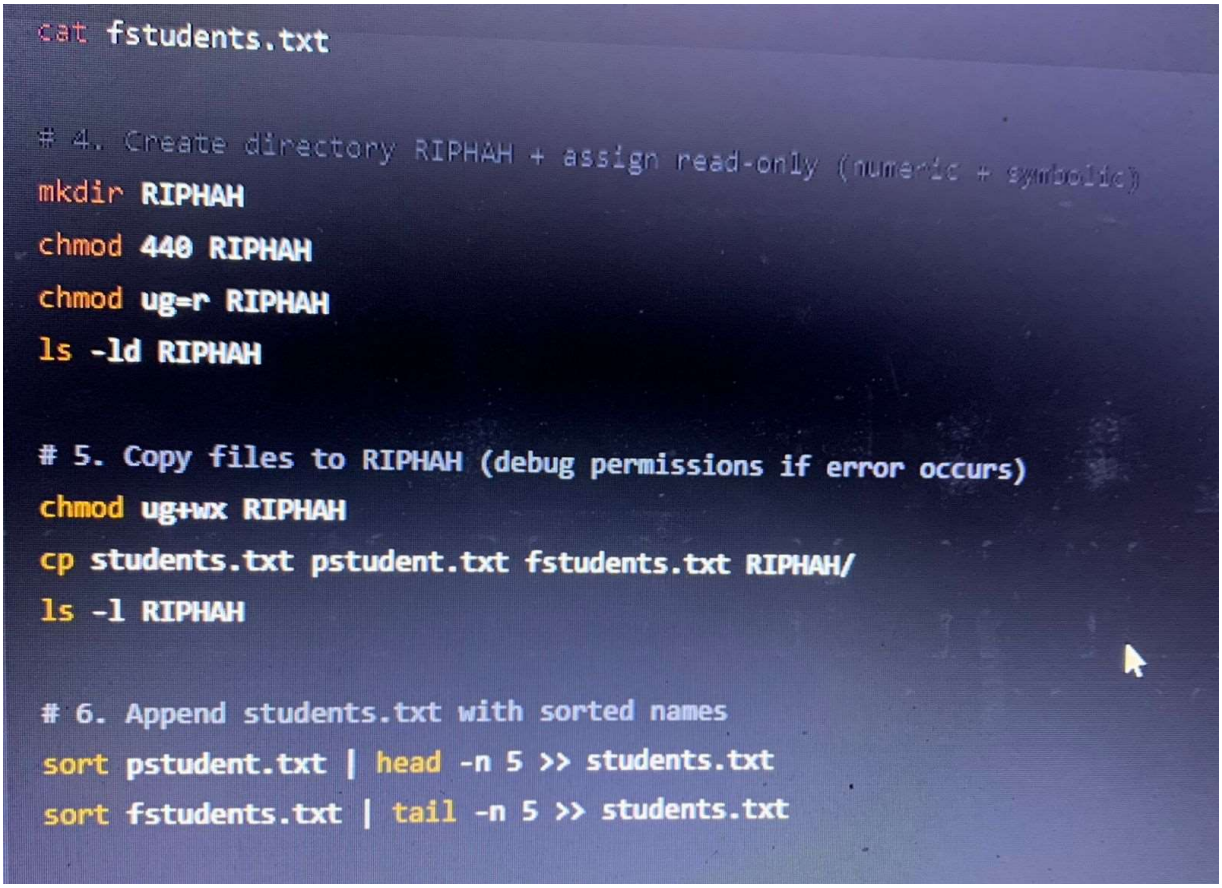


```
touch students.txt pstudent.txt fstudents.txt
ls -l

# 2. Assign read-only permission (numeric + symbolic)
chmod 400 students.txt pstudent.txt fstudents.txt
chmod u=r students.txt pstudent.txt fstudents.txt
ls -l

# 3. Debug permissions for writing + enter names
chmod u+rw pstudent.txt fstudents.txt
echo -e "Ali\nBilal\nSara\nUsman\nHina\nTariq\nRida\nAhmed\nIqra\nFaisal" > pstudent.txt
echo -e "Ayesha\nZara\nOmar\nNida\nSameer\nShahid\nLubna\nImran\nMaira\nYasir" > fstudents.txt
cat pstudent.txt
cat fstudents.txt
```

Tasks 8:



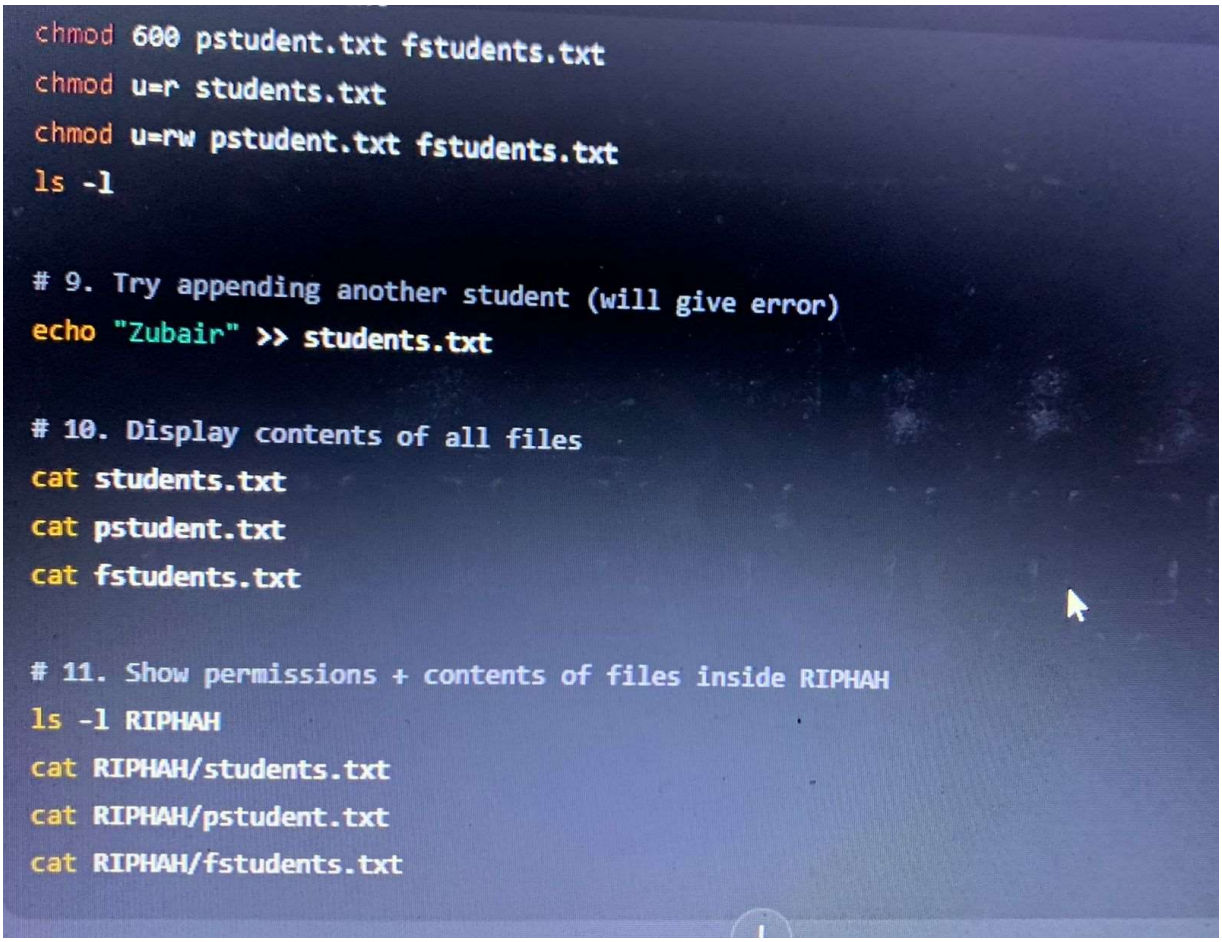
```
cat fstudents.txt

# 4. Create directory RIPHAH + assign read-only (numeric + symbolic)
mkdir RIPHAH
chmod 440 RIPHAH
chmod ug=r RIPHAH
ls -ld RIPHAH

# 5. Copy files to RIPHAH (debug permissions if error occurs)
chmod ug+wx RIPHAH
cp students.txt pstudent.txt fstudents.txt RIPHAH/
ls -l RIPHAH

# 6. Append students.txt with sorted names
sort pstudent.txt | head -n 5 >> students.txt
sort fstudents.txt | tail -n 5 >> students.txt
```

Tasks 9:



```
chmod 600 pstudent.txt fstudents.txt
chmod u=r students.txt
chmod u=rw pstudent.txt fstudents.txt
ls -l

# 9. Try appending another student (will give error)
echo "Zubair" >> students.txt

# 10. Display contents of all files
cat students.txt
cat pstudent.txt
cat fstudents.txt

# 11. Show permissions + contents of files inside RIPHAH
ls -l RIPHAH
cat RIPHAH/students.txt
cat RIPHAH/pstudent.txt
cat RIPHAH/fstudents.txt
```

THE END :