

UNIX ASSIGNMENT

Bhogyam Likhitha

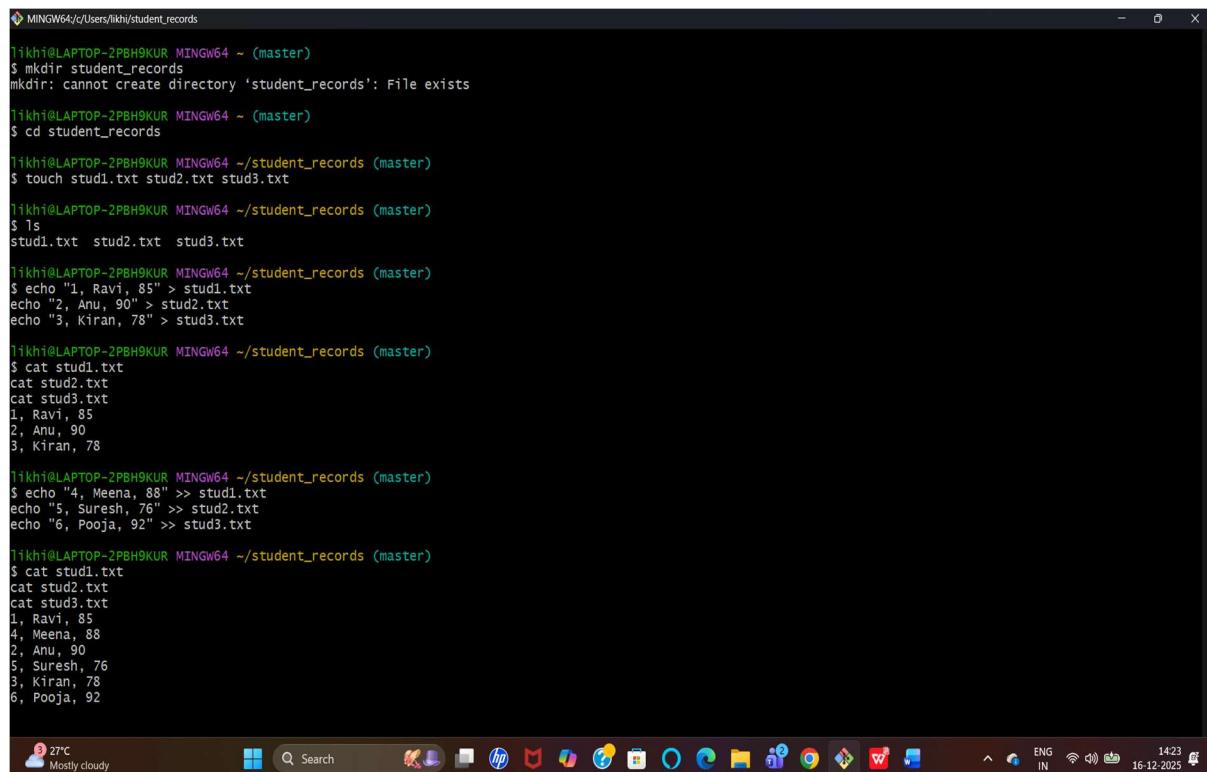
Create a directory called student_records. Inside it, create three files:

- stud1.txt
- stud2.txt
- stud3.txt

id, name, marks

Tasks

1. Create directory
2. Create files
3. Insert sample data
4. Display contents of all files
5. Append one more student record to each file



```
MINGW64/c/Users/likh/student_records
likhi@LAPTOP-2PBH9KUR MINGW64 ~ (master)
$ mkdir student_records
mkdir: cannot create directory 'student_records': File exists
likhi@LAPTOP-2PBH9KUR MINGW64 ~ (master)
$ cd student_records
likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ touch stud1.txt stud2.txt stud3.txt
likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ ls
stud1.txt stud2.txt stud3.txt
likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ echo "1, Ravi, 85" > stud1.txt
echo "2, Anu, 90" > stud2.txt
echo "3, Kiran, 78" > stud3.txt
likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ cat stud1.txt
cat stud2.txt
cat stud3.txt
1, Ravi, 85
2, Anu, 90
3, Kiran, 78
likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ echo "4, Meena, 88" >> stud1.txt
echo "5, Suresh, 76" >> stud2.txt
echo "6, Pooja, 92" >> stud3.txt
likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ cat stud1.txt
cat stud2.txt
cat stud3.txt
1, Ravi, 85
4, Meena, 88
2, Anu, 90
5, Suresh, 76
3, Kiran, 78
6, Pooja, 92
```

Assignment: Working With Permissions

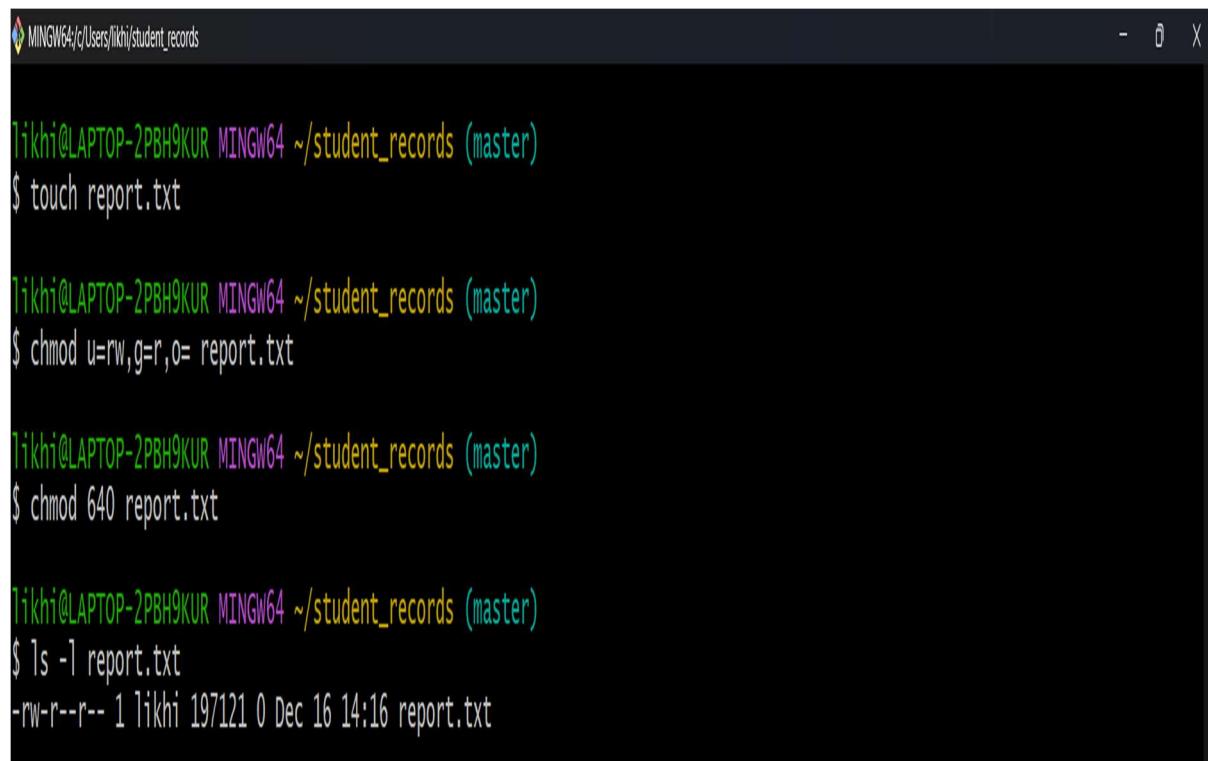
Problem Statement

Create a file report.txt and change its permissions so that:

- Owner: read + write
- Group: read only
- Others: no permission

Tasks

1. Use chmod symbolic mode
2. Use chmod numeric mode
3. Verify permissions using ls -l



The screenshot shows a terminal window titled 'MINGW64/c/Users/likhil/student_records'. The session starts with the user creating a file named 'report.txt' using the command '\$ touch report.txt'. Next, the user changes the permissions of the file using the command '\$ chmod u=rw,g=r,o= report.txt'. Finally, the user verifies the permissions by running '\$ ls -l report.txt', which displays the output '-rw-r--r-- 1 likhil 197121 0 Dec 16 14:16 report.txt', indicating that the owner has full permissions (read, write, execute), the group has read permission, and others have no permission.

```
likhil@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ touch report.txt

likhil@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ chmod u=rw,g=r,o= report.txt

likhil@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ chmod 640 report.txt

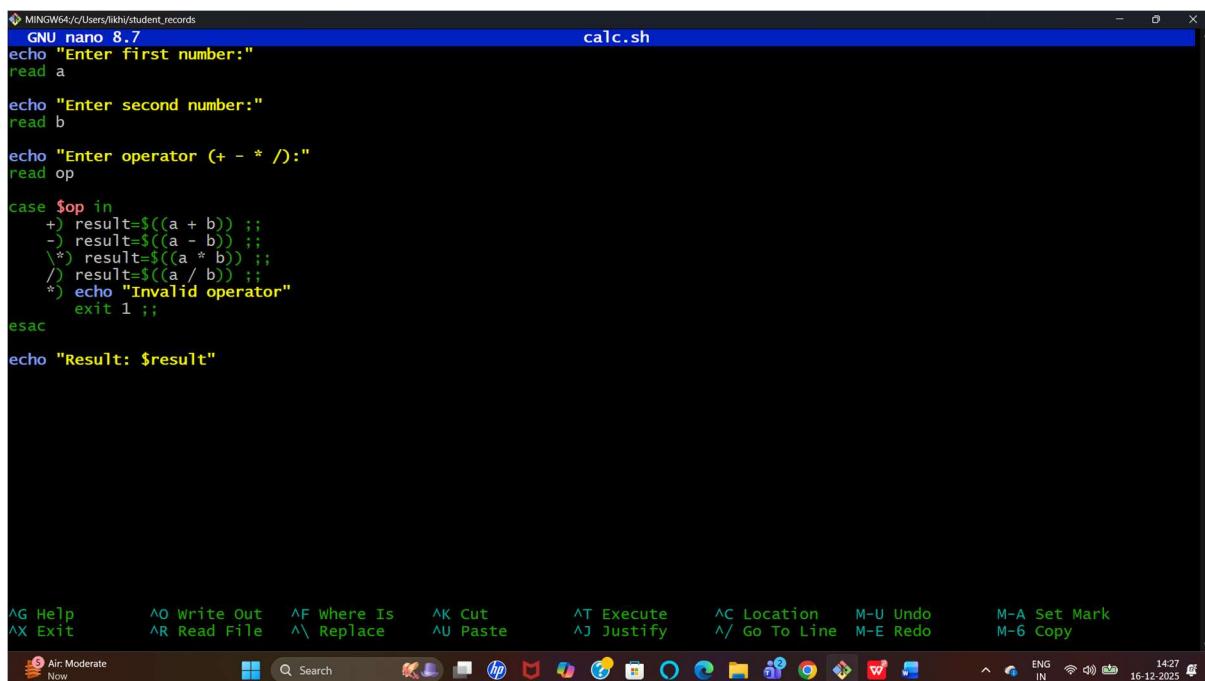
likhil@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ ls -l report.txt
-rw-r--r-- 1 likhil 197121 0 Dec 16 14:16 report.txt
```

Assignment: Shell Script – Simple Calculator

Problem Statement

Write a shell script calc.sh that:

- Accepts two numbers and an operator (+, -, *, /)
- Performs the requested operation
- Displays the result



The screenshot shows a terminal window titled "calc.sh" containing the following shell script code:

```
#!/bin/bash
echo "Enter first number:"
read a

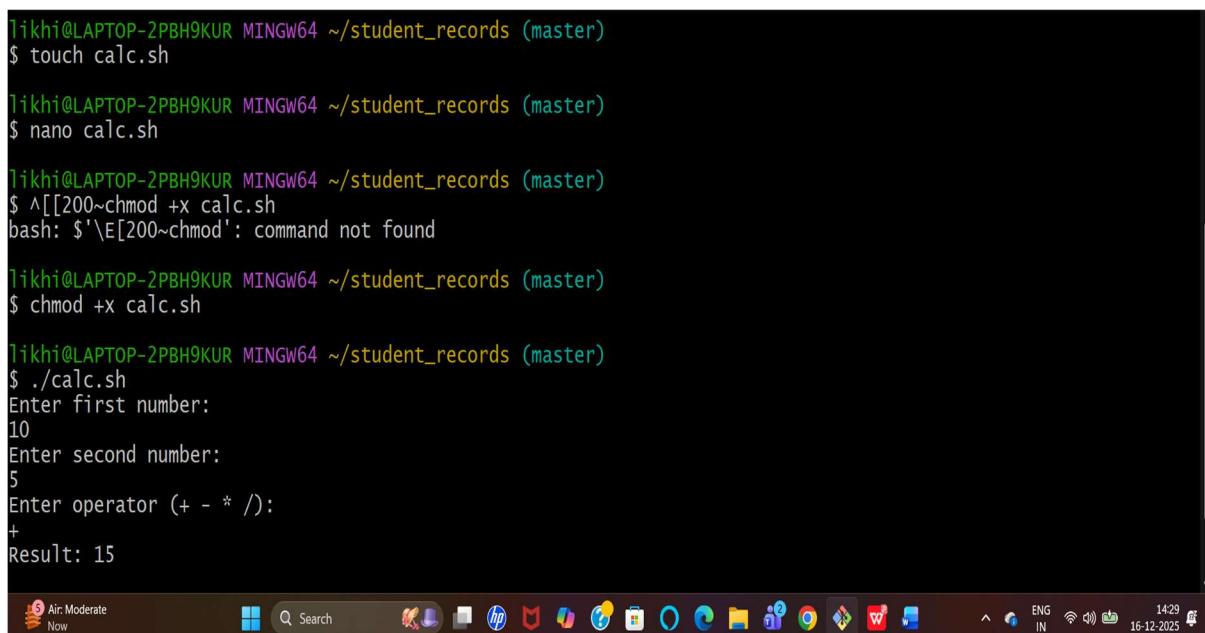
echo "Enter second number:"
read b

echo "Enter operator (+ - * /):"
read op

case $op in
    +) result=$((a + b));;
    -) result=$((a - b));;
    *) result=$((a * b));;
    /) result=$((a / b));;
    *) echo "Invalid operator"
        exit 1;;
esac

echo "Result: $result"
```

The terminal window includes a menu bar with options like Help, Write Out, Where Is, Cut, Execute, Location, Undo, Set Mark, and Exit. Below the menu is a toolbar with icons for Air Moderate Now, Search, and various system applications. The bottom status bar shows system information like ENG IN, 14:27, and 16-12-2025.



The screenshot shows a terminal window with the following session:

```
likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ touch calc.sh

likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ nano calc.sh

likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ chmod +x calc.sh
bash: $'\E[20~chmod': command not found

likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ chmod +x calc.sh

likhi@LAPTOP-2PBH9KUR MINGW64 ~/student_records (master)
$ ./calc.sh
Enter first number:
10
Enter second number:
5
Enter operator (+ - * /):
+
Result: 15
```

The terminal window includes a menu bar with options like Help, Write Out, Where Is, Cut, Execute, Location, Undo, Set Mark, and Exit. Below the menu is a toolbar with icons for Air Moderate Now, Search, and various system applications. The bottom status bar shows system information like ENG IN, 14:29, and 16-12-2025.