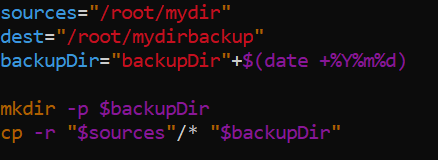
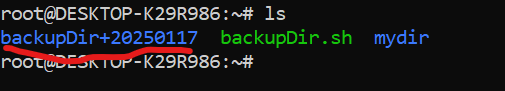
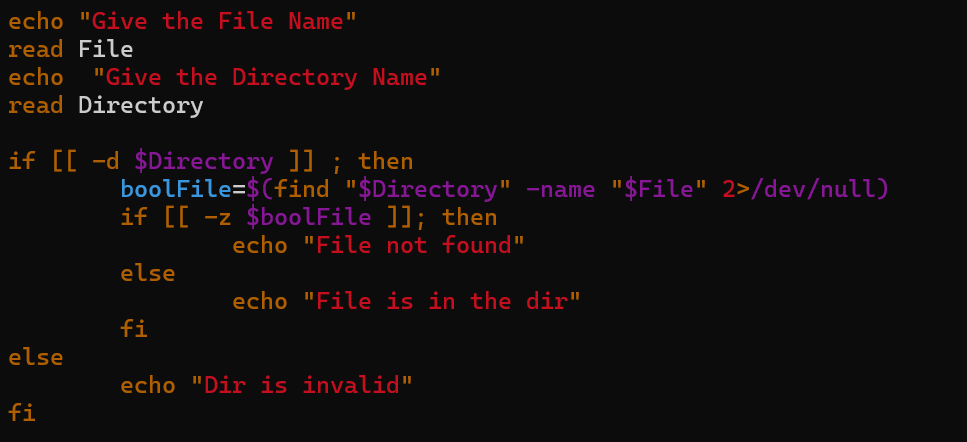
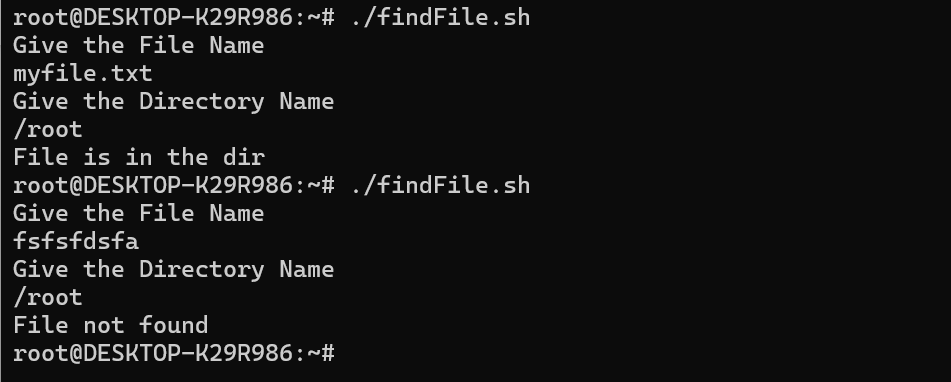
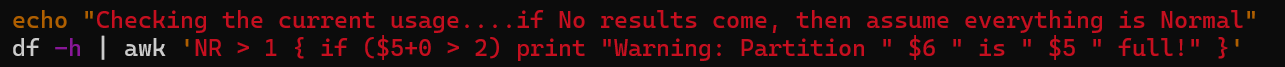
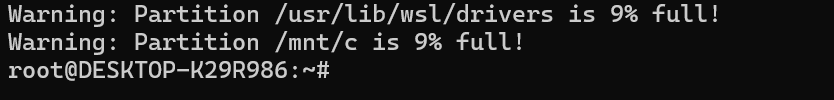
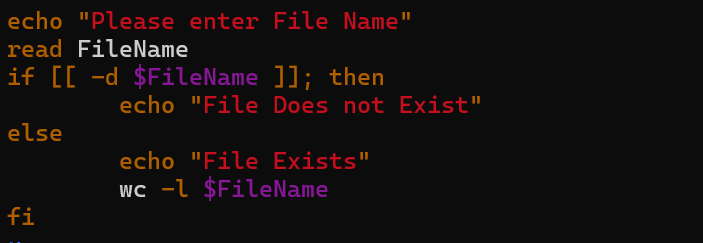
**Shell Scripting**

1. Extension of the shell file in .sh
2. You need to make it an executable before you could run it. (chmod +x <file\_name>)
3. You can run it just by calling its name - ./script\_name.sh
4. Below is my **first script**, which takes backup of a whole directory, please find the minute observations. 
   1. Declaring variables does require $sign. But while using them $sign is required that too within double quotes.
   2. Spaces play a major role! DO NOT GIVE SPACES or it will fail
   3. See how date command needs to be inside a $() to be used with a string. And concatenation works with +
5. Output:  
   
6. **Script – 2** 🡪 This script simply check if a file is present is a certain directory or not. Find below the script, observations and output, 
   1. Read 🡪 used to take the input from user
   2. If [[ ]] ; then 🡪 else 🡪 fi ----- this is the standard format to use if
   3. There needs to be space [[ <space> ….<space>]] else error will show
   4. to find what -z, -d means use the command man test 🡪 man here means manual, this can be used for other commands as well, like man find
   5. find commands searches for a file in directory
7. Output
8. Script-3 🡪 it checks if the disk usage is greater than some threshold. 
   1. Here only important command is awk, which takes the output and treat it as comma separated file, and applies pattern and action. I have seen this command used many times, so learn it.
   2. NR means Number of record > 1, basically it asks the awk to skip the first line, which are headers.
   3. $5+0 🡪 this forces the linux to treat the string as a number
9. Output: 
10. Script 3 🡪 It just calculates how many lines are there in file, simple WC command 
11. Now how to add, the script in cron? Its so simple!
    1. Crontab -e
    2. Then add 🡪 \* \* \* \* \* /root/alertDiskusage.sh > /root/logged.txt
    3. Reverify using crontab -l
    4. That’s it, see the output, (remember only the latest log will be stored)