Mission Name: Redirection and Pipelines

Commands Output ——————<———————————————> To the display
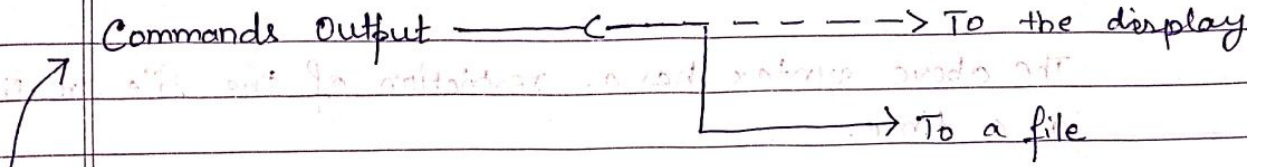
                                    └————————→ To a file

Output Redirection → we will direct the output from
                         screen to files.

* "echo" is an in-built command that is used to print on
  screen whatever is passed to it as input.

* Output of a command can be redirected to the outfile
  by using ">".

    Eg: echo "Hello" > hello.txt
        ≫ cat Hello.txt
        Hello

* If we will again use ">" on hello.txt, its previous
  content will be overwritten. we can overcome this issue.

    Eg:- grep -ih "math" * > /home/dq/math_data

* So, to overcome the issue, we can use "≫" redirection
  instead of ">" because it will append the content at
  the end of file, with previous contents.

    Eg:- grep -hi ",Math" * ≫ /home/dq/math_dataset

* Creating Empty files with echo:-

    echo -n "" > filename
            └ Dont append a "\n"

* Creating empty files with output redirection:-

"> filename "

The above syntax has a restriction of one file creation at a time.

* To create one or more empty files at a time, we can use "touch" command.

Eg:- touch file1 file2 .... file n

* what touch does is it updates the timestamp of an already existing file and if not then creates a new file.

* Pipeline :-

Cutting off the intermediate step of writing to a file and connecting the output of a command to the input of another command.

* we can connect the output of <command-1> to the input of <command-2> by using "|", pipe operator responsible for pipelining.

Eg:- <command-1> | <command-2>

Eg:- cut -d "," -f2,5 example.csv | grep "^0"

→ Filter output of this and print rows starting with 0.

* sort -u * | wc -l
└ show only no. of lines.

* /dev/null → Null Device → Used to discard data.