Notes 4

Wildcards

* Wildcard

The asterisk(*) wildcard matches any number of characters (including zero) in a filename.

- Examples
  - `ls *.txt`: Lists all files with the ".txt" extension.
  - `ls file*.`: Lists all files starting with "file".
  - `ls *123*`: Lists all files containing "123" anywhere in the filename.

? Wildcard

The question mark(?) wildcard matches exactly one character in a filename.

- Examples
  - `file?.txt`: Matches files like "file1.txt", "fileA.txt", etc., where "?" can be any single character.
  - `ls ./.??*`: Lists all the hidden files in the current directory.
  - `ls *.???`: Lists all files with a three letter file extension.

[] Wildcard

The bracket([]) wildcard matches any one of the characters enclosed within the brackets.

- Examples
  - `ls f[aeiou]*`: Lists all files that include a vowel after the letter f.
  - `ls f[a-z]*`: Lists all files that have a range of letters after f.
  - `ls *[0-9]*`: Lists files with at least one number in its name.

Brace Expansion

Brace expansion({}) is a feature available in many Unix-like shells, such as Bash, that allows you to generate strings based on patterns or lists.

- Examples
  - `echo {a,b,c}`: Generates "a", "b", and "c".
  - `echo file{1..3}.txt`: Generates "file1.txt", "file2.txt", and "file3.txt".
  - `echo {apples,bananas}_{red,green}`: Generates "apples_red", "apples_green", "bananas_red", "bananas_green".