To search in Multiple files

syntax is

grep <option> <pattern> File1_name File2_name

Example 1 : search 'Java' in Student.txt and Student1.txt

Ans : grep -i Java Student.txt Student1.txt

Example 2: Search 'Java' in all txt files

Ans: grep -i Java *.txt

Search multiple words in a file

To search multiple words in a file we have two ways
1) by using -e option
2) by using egrep command (egrep is extended form of grep)

1) by using -e option

Syntax : grep <option> -e 'first_word' -e 'second_word' file_name

Example 1: serach 'Java' and 'Python' in Student.txt file

Ans : grep -i -e 'Java' -e 'Python' Student.txt

2) By using egrep command

Syntax is : egrep <option> <pattern> File_name

Example 1: serach 'Java', c++ and 'Python' in Subject.txt file

Ans: egrep -i 'java|c++|python' Subject.txt
or
Ans egrep -i "java|c++|python" Subject.txt
or
Ans egrep -i "(java|c++|python)" Subject.txt

Note : egrep is more powerfull than normal grep command

grep with -F option or fgrep

-F option example : Find Java , c++ and Math in Subject.txt file
Ans :

```
grep -F "Java
>C++
> Math" Subject.txt
```

Note: String should be seperated by new line
Ones we press enter then > bracket will come automatically

fgrep stands for Fixed String Global Regular Expression Print

Example for fgrep command : Find Java , c++ and Math in Subject.txt file

Ans : fgrep -i "java
>c++
>math" Subject.txt

Note : egrep and fgrep commands deprecated and hence it is recomonded to use -e option and -F option

Types of Regular Expression/Pattern

All regular expression patterns are divided into 3 types

1) Character Pattern
2) Word Pattern
3) Line Pattern

1) Character Pattern

Example 1: Display all lines which contains d followed by any number of characters

Ans : grep 'd*' File_name

Example 2: grep 'c[aeiou]ll' Demo.txt

It will search for call, Cell, Cill Coll Cull

Example 3: grep 'b..l' Demo.txt

here . means any character. It will serach for all 4 letter words where first letter is b and last letter is l

2) word Pattern

\<word\> : Search for given word, It is exactly same as -w option

\<xyz --> It will serach for word start with xyz

xyz\> It will serach for the word end with xyz

3) Line pattern

^ -> Line start with

$ -> Line end with

Example 1: Find all lines start with d

Ans : grep '^d' File_name

ls -l | grep '^d' :-> show only directory

ls -l | grep '^-' :-> show only files

ls -l | grep '^l' :-> show only link file

Example 2: Display all lines start with 'the'

Ans: grep '^the' File_name

Example : Display all lines start with vowels

Ans : grep '^[aeiou]' File_name

Example Display all lines not start with vowels

Ans : grep '^[^aeiou]' File_name

Example : Display all lines which end with 't'

Ans : grep '$t' File_name

Example : Display all lines which end with vowels
Ans : grep '$[aeiuo]' File_name

Example : Display all lines which end with digit
Ans : grep '$[0-9]' File_name

Example Display all lines where line contains exactly 4 character
Ans : grep '^....$' File_name

Example Display all lines which start with dot
Ans : grep '^\.' File_name

Example Display all lines which end with $
Ans : grep '\$$' File_name

IMP Example: Display all blank lines from file

Ans : grep '^$' File_name

IMP Example : Display all lines except blank lines

Ans : grep -v '^$' File_name

IMP Example How to delete blank lines present in the given file ?

Ans : grep -v '^$' File_name > File_name