**Basic Usage:**

**egrep or grep –E** Run grep with extended regular expressions.

**-i** Ignore case (ie uppercase, lowercase letters).

**-v** Return all lines which don't match the pattern.

**-w** Select only matches that form whole words.

**-c** Print a count of matching lines.

Can be combined with the -v option to print a count of non matchine lines.

**-l** Print the name of each file which contains a match.

Normally used when grep is invoked with wildcards for the file argument.

**-n** Print the line number before each line that matches.

**-r** Recursive, read all files in given directory and subdirectories.

**Regular Expressions:**

**.** A single character

**[abc]** Range. ie any one of these characters

**[^abc]** Not range. A character that is not one of those enclosed.

**(abc)** Group these characters and remember for later.

**\n** Replace n with a number. Recall the charactes matched in that set of brackets.

May also be used to rename files or directories.

**|**  The logical 'or' operation.

**\**  In front of a character, removes it's special meaning.

**Regular Expression Multipliers:**

**?** The preceding item is optional, it is matched zero or one times.

**\*** The preceding item will be matched zero or more times.

**+** The preceding item will be matched one or more times.

**{n}** The preceding item will be matched exactly n times.

**{n,}** The preceding item will be matched n or more times.

**{n,m}** The preceding item will be matched between n and m times.

**Regular Expression Anchors:**

**^**  From the beginning of the line.

**$** To the end of the line.

**\<** At the beginning of a word.

**\>** At the end of a word.

**\b** Match either the beginning or end of a word.

**Examples:**

**egrep 'mellon' myfile.txt**

Print every line in myfile.txt containing the string 'mellon'.

**egrep -n 'mellon' myfile.txt**

Same as above but print a line number before each line.

**egrep '(.)bb\1' myfile.txt**

Find every line with 2 b's and the same character both before and after those b's.

**egrep -l '[0-9]{8,}' /files/projectx/\***

Print each file in the directory projectx which contains a number of 8 digits or more.

**egrep '\b[a-z0-9.\_%+-]+@[a-z0-9.-]+\.[a-z]{2,4}\b' myfile.txt**

Print every line of myfiles.txt containing an email address.

Note: this is just a simple email matching pattern. There is a miniscule number of email addresses it will not match.