

Searching text files – grep

```
grep -F options string file1 file2 ...
grep options regexp file1 file2 ...
grep -E options eregexp file1 file2 ...
egrep options eregexp file1 file2 ...
```

Interesting options: `-i` — ignore case, `-n` — print line numbers, `-v` — search for lines **without** matches, `-h` — do not print file name (when searching multiple files). **Important:** there are two versions of `grep` on babbage.

Regular expressions in vim and less

```
Search: /<regexp> ↵
Search backward: ?<regexp> ↵
Substitute (vim only): :<range>s/<regexp>/<string>/<options> ↵
```

Measuring file size – wc

`wc options file1 file2 ...` prints file sizes (and total). `wc` is capable of printing character, word and line counts. See documentation for full description.

Sorting files – sort

Can sort lines in a file alphabetically or based on numerical values. It's possible to tell `sort` to select parts of a line as a "key" for sorting. `sort` can also eliminate duplicate lines (or lines with duplicate "keys"). See documentation for full description.

Batched text file processing – sed

`sed` is good for writing scripts that do simple file editing operations automatically. `sed` can do substitutions (including the ones with regular expressions), add and delete lines in particular places in the file, etc. See documentation for full description.

Regular expressions

	vi	vim	grep	egrep	sed	awk
Matches						
any character
zero or more preceding	*	*	*	*	*	*
beginning of line	^	^	^	^	^	^
end of line	\$	\$	\$	\$	\$	\$
match one from a set	[]	[]	[]	[]	[]	[]
escape following character	\	\	\	\	\	\
store pattern	\(\)	\(\)	\(\)	\(\)	\(\)	\(\)
match a range of instances	{ }	{ }	{ }	{ }	{ }	{ }
one or more preceding	\+	\+	\+	\+	\+	\+
zero or one preceding	\=	\=	\=	\=	\=	\=
group expression to match		\		()		()
choices to match		<				
match word beginning	<	<				
match word end	>	>				
text matched by n-th \ (\)	\n	\n	\n		\n	
the whole matched text	&	&			&	
previous replacement patt	~	~				
uppercase next character	\u	\u				
uppercase next characters	\U \E	\U \E				