

# Chapter 6 - Unix Commands In-Depth

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## Anatomy of a Command

```
$ Command [options] [arguments] //Unix command structure
- $ ls -sCF /usr/bin
- $ ls -s -C -F /etc

$ man ls //manual

$ apropos ls //finds all related files

$ whereis echo //shows where all echo related files are

$ which echo //only shows executable
```

## Meta Characters

```
$ Wildcard
- ? : matches one character
- * : matches one or more characters
- [] : matches one of the characters in [...]

$ ls *.txt
$ ls hi?.txt
$ ls hi[12357].txt
```

## Redirection

```
$ ls > ls.txt

$ sort < /etc/group //sorts a textfile alphabetically
$ sort < /etc/group > sort.txt

$ find / -name 'hi.txt' 2> /dev/null // find a file by name. Permission denied
messages will be omitted.

$ find /export/home -name 'hi.txt' > out.txt 2>&1
$ find /export/home -name 'hi.txt' 2> out.txt 1>&2
```

## Pipes

The Output of the first process is the input of the second process.

```
$ cho | wc // word count who command
$ cat /etc/passwd | grep unix30 // shows only lines that contain unix30
$ echo $PATH // shell variable path
$ ${PATH}${TERM} //shell variable value
$ echo today is `date`
$ \$PATH Escape the dollar sign
```