Zsh Shell with power globbing

CONCEPTS

Zsh does not word-split unquoted $var, and a glob pattern that matches nothing is an error unless you add (N).

History !! and !$
↓ alias
Aliases global and suffix too
↓ expand
Expansion ${...}, $(...), globs
↓ run
Command status in $?

Startup files: .zshenv always, .zprofile for login, .zshrc for interactive. Put aliases and prompt in .zshrc.

Array indices start at 1, not 0, unless KSH_ARRAYS is set.

GLOBBING

ls **/*.<ext>
Match files in all subdirectories

ls *(/)
Directories only

ls *(.)
Regular files only

ls *(om[1,5])
Five most recently modified

ls *(Lm+10)
Files larger than 10 MB

ls *(mh-1)
Modified in the last hour

ls *(.N)
Match or give nothing, no error

ls ^*.log
Everything except .log files

ls *.(jpg|png)
Alternation in a pattern

PARAMETER EXPANSION

${var:-<default>}
Use default if unset or empty

${var:u}
Uppercase

${var:t}
Tail: file name of a path

${var:h}
Head: directory of a path

PARAMETER EXPANSION (cont.)

${var:r}
Strip the extension

${var/<old>/<new>}
Replace first match

${var//<old>/<new>}
Replace all matches

${(s:,:)var}
Split on commas into an array

ARRAYS & MAPS

arr=(a b c)
Create an array

$arr[1]
First element

$arr[-1]
Last element

arr+=(<item>)
Append an element

typeset -A <map>
Declare an associative array

typeset -U path
Keep PATH entries unique

path=(~/bin $path)
Prepend to PATH

HISTORY

!!
Repeat the previous command

sudo !!
Rerun the last command as root

!$
Last word of previous command

history
List commands with numbers

Ctrl+R
Search history backwards

Alt+.
Insert last argument of previous

setopt share_history
Share history between sessions

OPTIONS

setopt <option>
Turn an option on

unsetopt <option>
Turn an option off

OPTIONS (cont.)

setopt extended_glob
Enable ^, ~ and # patterns

HISTSIZE=<n> SAVEHIST=<n>
Memory and file history sizes

PROMPT, ALIASES & COMPLETION

PROMPT='%n@%m %~ %# '
Set the prompt

alias <name>='<cmd>'
Define an alias

autoload -Uz compinit && compinit
Enable the completion system

zstyle ':completion:*' menu select
Arrow-key completion menu

Tab Tab
Show or cycle completions

source ~/.zshrc
Reload the config file

DIRECTORIES & FUNCTIONS

<name>() { ... }
Define a function

DIFFERENCES FROM BASH

Behaviour changes

Topic	Bash	Zsh
Unquoted $var	word-split	not split
Array start	index 0	index 1
No glob match	passes pattern	error
Prompt read	read -p	read '?txt '
Config file	~/.bashrc	~/.zshrc
Ignore case	nocasematch	(#i)

read -r '?Name: ' <var>
Prompt text with read

RECIPES

Starter ~/.zshrc

```
autoload -Uz compinit && compinit
setopt auto_cd share_history
HISTFILE=~/.zsh_history
SAVEHIST=50000
typeset -U path; path=(~/bin
$path)
```

Delete old logs, dry run first

```
ls -l **/*.log(.Lm+10mw+4)
# review the list, then
rm -- **/*.log(.Lm+10mw+4)
```