

1 Shell CheatSheet

LANGUAGES

- PDF Link: [cheatsheet-shell-A4.pdf](#), Category: languages
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-shell-A4>
- Related posts: Vim CheatSheet, #denny-cheatsheets

File me Issues or star this repo.

1.1 Basic

| Name | Comment |
|--|--|
| Redirect stdout/stderr | <code>ls /tmp >/dev/null 2>&1</code> |
| Deal with filename | <code>basename \$f, dirname \$f</code> |
| Use timeout: avoid command hang | <code>timeout 10 sh -c 'ls -lt'</code> |
| Restart shell without killing terminal | <code>exec -l \$SHELL</code> |
| Run sub-shell | <code>echo \$BASH_SUBSHELL; (echo "Running in subshell: \$BASH_SUBSHELL")</code> |
| Set pipefail | <code>set -ueoxv pipefail, set +ueoxv pipefail</code> |
| Shell match regexp | <code>echo \$str, then grep "\$regexp"</code> |
| Shell match regexp | <code>expr match "\$date" "[0-9]\{8\}" >/dev/null && echo yes</code> |
| Run static code check | Link: shellcheck |

1.2 Shell script

| Name | Comment |
|--|---|
| Trap exit signal | <code>code/trap-exit.sh</code> |
| Shell retry | <code>code/shell-retry.sh</code> |
| Check if a string contains a substring | <code>code/string-contains.sh</code> |
| Check if a string in a list | <code>code/string-in-list.sh</code> , Link: stackoverflow |
| Log with timestamp | <code>code/log-with-timestamp.sh</code> |
| Quit if current user is not root | <code>code/assert-user-root.sh</code> |
| Set -x on fly | <code>code/restore-debug-output.sh</code> |
| Shell run curl check | <code>code/curl-test.sh</code> |

1.3 Environment variables

| Name | Comment |
|--|---|
| List all environment variables | <code>export</code> |
| Define a new env variable | <code>export NAME1="value1"</code> |
| Define a variable with default value of others | <code>export MYVAR="\${MYVAR:-\$OTHERVAR}"</code> |

1.4 iterm

| Name | Comment |
|---------------|---------------------|
| Delete a word | <code>Ctrl+w</code> |

1.5 zsh

| Name | Comment |
|-------------------------------|---|
| Disable all zsh's autocorrect | In <code>~/ .zshrc</code> , <code>unsetopt correct_all</code> |
| Disable a given autocorrect | In <code>~/ .zshrc</code> , alias <code>ssh='nocorrect ssh'</code> . <code>zsh_{disable}</code> |

1.6 GNU tools

1.6.1 Echo string

| Name | Comment |
|----------------------|--|
| Echo red text | <code>echo -e "hello,[0;31m there [0;31m"</code> |
| Echo multiple lines | <code>echo -e "hello,"</code> |
| Echo bold text | <code>echo -e hello, "\033[1mThis is bold text.\033[0m"</code> |
| Echo underlined text | <code>echo -e hello, "\033[4mThis is underlined text.\033[0m"</code> |

1.7 Shell Basic

1.7.1 cd

| Name | Comment |
|--------------------------|--|
| Go to given folder | <code>cd /var/log/</code> |
| Go to folder in subshell | <code>(cd /var/log/ && ls)</code> After this, PWD won't be changed |
| Go to home | <code>cd</code> |
| Go to parent folder | <code>cd ..</code> |
| Go to previous folder | <code>cd -</code> |

1.7.2 Numeric

| Name | Comment |
|--------------------|--|
| <code>*</code> | <code>expr 5 * 4</code> |
| <code>+</code> | <code>let z=x+y, z=\$((x+y))</code> |
| <code>==</code> | <code>int1 -eq int2, [\$? -eq 0] && echo "good"</code> |
| <code>>=</code> | <code>int1 -ge =int2</code> |
| <code>></code> | <code>int1 -gt =int2</code> |
| <code><=</code> | <code>int1 -le =int2</code> |
| <code><</code> | <code>int1 -lt =int2</code> |
| <code>!=</code> | <code>int1 -ne =int2</code> |

1.7.3 xargs

```
# Run grep for files filtered by find
find /var/log -name "*.log" | xargs grep -i error
```

```
# Loop with pipes
cat /etc/passwd | awk -F':' '{print $1}' | xargs -I{} sudo -l -U {} | grep -v "not allowed to"
```

1.8 Scripts

- Compare command output

```
[ 0 -eq $(find ./data -name "*.txt" -type f -print | wc -l) ]
```

- get ip from eth0

```
/sbin/ifconfig eth0 | grep 'inet addr:' | cut -d: -f2 | awk '{ print $1}'
```

1.9 More Resources

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