

find /dir -option param

Example: `find . -iname "*needle*"`

Where & What - Names, files & directories

look for "needle.txt" within the current directory & its subdirectories

```
find . -name "needle.txt"
```

ignore case, find "Needle" & "needle"

```
find . -iname "needle"
```

name contains "needle"; list only matching **files**

```
find . -type f -name "*needle*"
```

search everywhere; list only matching **directories**

```
find / -type d -name "needle"
```

additionally ignore all errors, such as "Permission denied"

```
find / 2>/dev/null -type d -name "needle"
```

Check file contents

check all .txt files whether they contain "needle"

```
find . -type f -iname "*.txt" -print | xargs grep "needle"
```

same as above, but now it also works with filenames that contain spaces

```
find . -type f -iname "*.txt" -print0 | xargs -0 grep "needle"
```

find all empty files in /tmp

```
find /tmp -type f -empty
```

remove all these empty files

```
find /tmp -type f -empty -print | xargs rm -f
```

File sizes & Times

files bigger than 50MB but smaller than 100MB

```
find / -type f -size +50M -size -100M
```

created during the last 50 days

```
find / -ctime -50
```

modified more than 90 minutes ago

```
find / -mmin +90
```

accessed during the last 24 hours but not within the last hour

```
find / -atime -1 -amin +60
```

Permissions & Owners

find all executable files

```
find / -perm /a=x
```

find files that don't have 644 permissions

```
find / -type f ! -perm 644
```

find files with 777 permissions and change them to 755

```
find / -type f -perm 0777 -print -exec chmod 755 {} \;
```

find all PDFs owned by user "seamstress" (-group exists, too)

```
find / -user seamstress -iname "*.pdf"
```

