

Syntax of find command is

```
find search_location what_to_find option file_or_directory_name
```

Example 1:

If we simply type find and press enter then we will get all files and directories present at current location. This is the default behaviour of the find command.

Example 2:

```
$ find A
```

Find all files and directories present in A

Example 3:

```
$ find A/B/C
```

Find all files and directories present in C

Example 4: List out only files present in directory A

```
$ find A -type f
```

Example 5: List out only directories inside of A

```
$ find A -type d
```

Example 6: Find files on the basis of name in the current location

```
$ find . -type f -name '*.txt'
```

Example 7: Find directory on the basis of name in the current location

```
find . -type d -name A
```

Find files on the basis of permission

Find files on the basis of permission

Example 1: find all files in current location who has 777 permission

Ans: `find . -type f -perm 777`

Example 2: find all files in current location who does not have 777 permission

Ans: `find . -type f ! -perm 777`

Example 3: find all directories in current location who has 457 permission

Ans: `find . -type d -perm 457`

Example : find all files and directory which are present in root users directory

`$ sudo find /root`

if we want to find empty files or directory then we need to use -empty option

Example 1: find all empty files present in current location

Ans: `find . -type f -empty`

Example 2: find empty file F2.txt in current location

Ans: `find . -type f -empty -name 'F2.txt'`

Example 3: find all empty directories present in current location

Ans: `find . -type d -empty`

Example 4: find empty directory name with AA in current location

Ans: `find . -type d -empty -name AA`

### Finding files on the basis of user name

If we want to find files on the basis of user name then we need to use **-user option**

**Example :** find all files present in current location where user name is rrd

Ans: `find . -type f -user rrd`

### Finding files on the basis of group name

If we want to find files on the basis of group name then we need to use **-group option**

**Example :** find all directories in current location who belongs to rrd group

Ans: `find . -type d -group rrd`

### Finding the files on the basis of size

-> If we want to find files or directory on the basis of size then we need to use **-size option**

-> To specify size we need to use below characters

- i) M -> MB
- ii) G -> GB
- iii) K -> KB
- iv) c -> Byte
- vi) + -> greather than
- vii) - -> for less than

Example : find files in the current location who size is 20kb

Ans: `find . -type f -size 20k` ( small k is need to use)

Example : find files in current location who size is greater than 20kb

Ans: `find . -type f -size +20k` ( small k is need to use)

Example : find files in current location whose size is less than 20kb

Ans: `find . -type f -size !-20k` (small k is need to use)

Example : find files in current location whose size is greater than 20kb but less than 4mb

Ans: `find . -type f -size +20K -size -4M`

Find files in current location whose size is greater than 40kb or less than 4mb

Ans: `find . -type f -size +40K -o -size -4M`

To specify or condition we need to use -o option