

File Creation

command → **touch**

it is use to create empty files , you can also create multiple files.

and it is also use to change the time stamp of files and directories

syntax:

touch <filename/path> → create a empty file

touch <file> <file2> <file3> → create multiple files

touch <file name/path>{start..stop} → create sequence file

touch <option> <filename/path>

options:

-d → change time stamp

-a → change access time only

-m → change modify time only

-r → (referance) use this file's access and modify time instead of current time

EG:

```
[root@server ~]# ls
```

```
anaconda-ks.cfg Desktop Documents Downloads Music Pictures Public Templates Videos
```

```
[root@server ~]# ls /
```

```
afs data etc kali media opt redhat sbin tmp web.sh
```

```
bin dev grras lib mnt proc root srv usr
```

```
boot dhparams.pem home lib64 nfsdata red run sys var
```

```
[root@server ~]# touch file1 → creates single file
```

```
[root@server ~]# ls
```

```
anaconda-ks.cfg Documents file1 Pictures Templates
```

Desktop Downloads Music Public Videos

```
[root@server ~]# touch red sample test
```

```
[root@server ~]# ls
```

anaconda-ks.cfg Documents file1 Pictures red Templates Videos

Desktop Downloads Music Public sample test

```
[root@server ~]# touch redhat.txt /file.txt /var/tmp/abc.txt
```

```
[root@server ~]# ls
```

anaconda-ks.cfg Documents file1 Pictures red sample test

Desktop Downloads Music Public redhat.txt Templates Videos

```
[root@server ~]# ls /
```

afs data etc home lib64 nfsdata red run sys var

bin dev file.txt kali media opt redhat sbin tmp web.sh

boot dhparams.pem grasper lib mnt proc root srv usr

```
[root@server ~]# ls /var/tmp/
```

abc.txt

systemd-private-5443332f320544b2affa780d9211cba4-bluetooth.service-pEwxnX

systemd-private-5443332f320544b2affa780d9211cba4-chronyd.service-90jYpz

systemd-private-5443332f320544b2affa780d9211cba4-colord.service-RVPNvk

systemd-private-5443332f320544b2affa780d9211cba4-dbus-broker.service-XHDdu2

systemd-private-5443332f320544b2affa780d9211cba4-ModemManager.service-QKbHoM

systemd-private-5443332f320544b2affa780d9211cba4-named.service-OLlxuX

systemd-private-5443332f320544b2affa780d9211cba4-rtkit-daemon.service-yxZPfP

systemd-private-5443332f320544b2affa780d9211cba4-switcheroo-control.service-MLh53L

systemd-private-5443332f320544b2affa780d9211cba4-systemd-logind.service-QUXM8A

systemd-private-5443332f320544b2affa780d9211cba4-upower.service-sq80lz

```
[root@server ~]# ls / /var/tmp/ .
```

..:

```
anaconda-ks.cfg Documents file1 Pictures red sample test
Desktop Downloads Music Public redhat.txt Templates Videos
```

/:

```
afs data etc home lib64 nfsdata red run sys var
bin dev file.txt kali media opt redhat sbin tmp web.sh
boot dhparams.pem grras lib mnt proc root srv usr
```

/var/tmp/:

abc.txt

```
#touch ./redhat.txt /file.txt /var/tmp/abc.txt
```

[root@server ~]# **touch "red abc"** → creates file name with space

```
[root@server ~]# ls
```

```
anaconda-ks.cfg Documents file1 Pictures red redhat.txt Templates Videos
Desktop Downloads Music Public 'red abc' sample test
```

```
[root@server ~]# touch test
```

```
[root@server ~]# ls
```

```
anaconda-ks.cfg Documents file1 Pictures red redhat.txt Templates Videos
Desktop Downloads Music Public 'red abc' sample test
```

[root@server ~]# touch abc{1..3} → creates sequence files

[root@server ~]# ls

```
abc1      abc3      Documents Music  red    sample Videos
anaconda-ks.cfg Downloads Pictures 'red abc' Templates
abc2      Desktop    file1    Public  redhat.txt test
```

[root@server ~]# touch xyz{1..3}.txt

[root@server ~]# ls

```
abc1      anaconda-ks.cfg file1    red      Templates xyz2.txt
abc{1...3} Desktop      Music   'red abc' test    xyz3.txt
abc2      Documents    Pictures redhat.txt Videos
abc3      Downloads    Public  sample   xyz1.txt
```

[root@server ~]# touch class{1..3}section{A..C}

[root@server ~]# ls

```
abc1      class1sectionB class3sectionB Music    sample   xyz3.txt
abc{1...3} class1sectionC class3sectionC Pictures Templates
abc2      class2sectionA Desktop      Public    test
abc3      class2sectionB Documents    red       Videos
anaconda-ks.cfg class2sectionC Downloads    'red abc' xyz1.txt
class1sectionA class3sectionA file1      redhat.txt xyz2.txt
```

[root@server ~]# touch .sample.txt → creates hidden file

[root@server ~]# ls

```
abc1      class1sectionB class3sectionB Music    sample   xyz3.txt
abc{1...3} class1sectionC class3sectionC Pictures Templates
abc2      class2sectionA Desktop      Public    test
abc3      class2sectionB Documents    red       Videos
anaconda-ks.cfg class2sectionC Downloads    'red abc' xyz1.txt
```

```
class1sectionA class3sectionA file1 redhat.txt xyz2.txt
```

```
[root@server ~]# ls -a
```

```
.          .bash_logout  class2sectionB Documents Public  Templates
..         .bash_profile class2sectionC Downloads red    test
abc1       .bashrc    class3sectionA file1  'red abc' Videos
abc{1...3} .cache      class3sectionB .lesshst redhat.txt .viminfo
abc2       class1sectionA class3sectionC .local  sample  xyz1.txt
abc3       class1sectionB .config  .mozilla .sample.txt xyz2.txt
anaconda-ks.cfg class1sectionC .cshrc    Music  .ssh    xyz3.txt
.bash_history class2sectionA Desktop  Pictures .tcshrc
```

```
[root@server ~]# ls /var/tmp/
```

```
abc.txt
```

```
systemd-private-5443332f320544b2affa780d9211cba4-bluetooth.service-pEwxnX
systemd-private-5443332f320544b2affa780d9211cba4-chrond.service-90jYpz
systemd-private-5443332f320544b2affa780d9211cba4-colord.service-RVPNvk
systemd-private-5443332f320544b2affa780d9211cba4-dbus-broker.service-XHDdu2
systemd-private-5443332f320544b2affa780d9211cba4-ModemManager.service-QKbHoM
systemd-private-5443332f320544b2affa780d9211cba4-named.service-OLlxuX
systemd-private-5443332f320544b2affa780d9211cba4-rtkit-daemon.service-yxZPfP
systemd-private-5443332f320544b2affa780d9211cba4-switcheroo-control.service-MLh53L
systemd-private-5443332f320544b2affa780d9211cba4-systemd-logind.service-QUXM8A
systemd-private-5443332f320544b2affa780d9211cba4-upower.service-sq80Iz
```

```
create files xyz redhat rhel in /var/tmp
```

```
[root@server ~]# touch /var/tmp/xyz /var/tmp/redhat /var/tmp/rhel
```

```
[root@server ~]# ls /var/tmp/
```

abc.txt

redhat

rhel

systemd-private-5443332f320544b2affa780d9211cba4-bluetooth.service-pEwxnX

systemd-private-5443332f320544b2affa780d9211cba4-chrond.service-90jYpz

systemd-private-5443332f320544b2affa780d9211cba4-colord.service-RVPNvk

systemd-private-5443332f320544b2affa780d9211cba4-dbus-broker.service-XHDdu2

systemd-private-5443332f320544b2affa780d9211cba4-ModemManager.service-QKbHoM

systemd-private-5443332f320544b2affa780d9211cba4-named.service-OLlxuX

systemd-private-5443332f320544b2affa780d9211cba4-rtkit-daemon.service-yxZPfP

systemd-private-5443332f320544b2affa780d9211cba4-switcheroo-control.service-MLh53L

systemd-private-5443332f320544b2affa780d9211cba4-systemd-logind.service-QUXM8A

systemd-private-5443332f320544b2affa780d9211cba4-upower.service-sq80lz

xyz

#OR

Using Absolute Path

```
[root@server ~]# touch /var/tmp/{file1,apple,sam}
```

```
[root@server ~]# ls /var/tmp/
```

abc.txt

apple

file1

redhat

rhel

sam

systemd-private-5443332f320544b2affa780d9211cba4-bluetooth.service-pEwxnX

systemd-private-5443332f320544b2affa780d9211cba4-chrond.service-90jYpz

systemd-private-5443332f320544b2affa780d9211cba4-colord.service-RVPNvk

systemd-private-5443332f320544b2affa780d9211cba4-dbus-broker.service-XHDdu2

systemd-private-5443332f320544b2affa780d9211cba4-ModemManager.service-QKbHoM

```
systemd-private-5443332f320544b2affa780d9211cba4-named.service-OLlxuX
systemd-private-5443332f320544b2affa780d9211cba4-rtkit-daemon.service-yxZPfP
systemd-private-5443332f320544b2affa780d9211cba4-switcheroo-control.service-MLh53L
systemd-private-5443332f320544b2affa780d9211cba4-systemd-logind.service-QUXM8A
systemd-private-5443332f320544b2affa780d9211cba4-upower.service-sq80lz
xyz
```

Using relative path

```
[root@server ~]# cd /var/tmp/
[root@server tmp]# touch application
[root@server tmp]# ls
abc.txt
apple
application
file1
redhat
rhel
sam
xyz
[root@server tmp]#
[root@server tmp]# cd
```

```
[root@server ~]# ls
abc1      class1sectionB  class3sectionB  Music  redhat.txt  xyz1.txt
abc{1...3} class1sectionC  class3sectionC  Pictures  rhel  xyz2.txt
abc2      class2sectionA  Desktop  Public  sample  xyz3.txt
abc3      class2sectionB  Documents  red  Templates
anaconda-ks.cfg class2sectionC  Downloads  'red abc'  test
class1sectionA  class3sectionA  file1  redhat  Videos
```

[root@server ~]# **stat file1** → **Display status of file**

File: file1

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18649779 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 20:13:56.964914271 +0530

Modify: 2025-06-30 20:13:56.964914271 +0530

Change: 2025-06-30 20:13:56.964914271 +0530

Birth: 2025-06-30 20:13:56.964914271 +0530

[root@server ~]# **touch -a file1** **#change access time only**

[root@server ~]# **stat file1**

File: file1

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18649779 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 20:54:48.180821718 +0530

Modify: 2025-06-30 20:13:56.964914271 +0530

Change: 2025-06-30 20:54:48.180821718 +0530

Birth: 2025-06-30 20:13:56.964914271 +0530

[root@server ~]# **touch -m file1** **#change modify time only**

[root@server ~]# **stat file1**

File: file1

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18649779 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 20:54:48.180821718 +0530

Modify: 2025-06-30 20:56:02.691818904 +0530

Change: 2025-06-30 20:56:02.691818904 +0530

Birth: 2025-06-30 20:13:56.964914271 +0530

```
[root@server ~]# touch -d "1 jun 2025 10:12:12" file1      #change access and modify time manually
```

```
[root@server ~]# stat file1
```

File: file1

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18649779 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-01 10:12:12.000000000 +0530

Modify: 2025-06-01 10:12:12.000000000 +0530

Change: 2025-06-30 20:59:05.819811990 +0530

Birth: 2025-06-30 20:13:56.964914271 +0530

-r --> reference time

```
[root@server ~]# touch -r file1 newfile
```

```
[root@server ~]# ls
```

abc1 class1sectionB class3sectionB Music redhat Videos

abc{1...3} class1sectionC class3sectionC newfile redhat.txt xyz1.txt

abc2 class2sectionA Desktop Pictures rhel xyz2.txt

abc3 class2sectionB Documents Public sample xyz3.txt

anaconda-ks.cfg class2sectionC Downloads red Templates

class1sectionA class3sectionA file1 'red abc' test

```
[root@server ~]# stat newfile
```

File: newfile

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18662743 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-01 10:12:12.000000000 +0530

Modify: 2025-06-01 10:12:12.000000000 +0530

Change: 2025-06-30 21:03:33.213801893 +0530

Birth: 2025-06-30 21:03:33.212801893 +0530

```
[root@server ~]# stat newfile
```

File: newfile

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18662743 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-01 10:12:12.000000000 +0530

Modify: 2025-06-01 10:12:12.000000000 +0530

Change: 2025-06-30 21:03:33.213801893 +0530

Birth: 2025-06-30 21:03:33.212801893 +0530

```
[root@server ~]# cat newfile        → read the file
```

```
[root@server ~]# stat newfile
```

File: newfile

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18662743 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 21:06:42.796794735 +0530

Modify: 2025-06-01 10:12:12.000000000 +0530

Change: 2025-06-30 21:03:33.213801893 +0530

Birth: 2025-06-30 21:03:33.212801893 +0530

[root@server ~]# **cat newfile**

[root@server ~]# **stat newfile**

File: newfile

Size: 0 Blocks: 0 IO Block: 4096 regular empty file

Device: fd00h/64768d Inode: 18662743 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 21:06:42.796794735 +0530

Modify: 2025-06-01 10:12:12.000000000 +0530

Change: 2025-06-30 21:03:33.213801893 +0530

Birth: 2025-06-30 21:03:33.212801893 +0530

[root@server ~]# **cat > newfile** → **edit the file**

redhat certified

press (ctrl+d) → to save and exit

[root@server ~]# **stat newfile**

File: newfile

Size: 18 Blocks: 8 IO Block: 4096 regular file

Device: fd00h/64768d Inode: 18662743 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 21:06:42.796794735 +0530

Modify: 2025-06-30 21:09:21.013788761 +0530

Change: 2025-06-30 21:09:21.013788761 +0530

Birth: 2025-06-30 21:03:33.212801893 +0530

```
[root@server ~]# cat newfile #read
```

redhat certified

```
[root@server ~]# stat newfile
```

File: newfile

Size: 18 Blocks: 8 IO Block: 4096 regular file

Device: fd00h/64768d Inode: 18662743 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 21:11:54.306782973 +0530

Modify: 2025-06-30 21:09:21.013788761 +0530

Change: 2025-06-30 21:09:21.013788761 +0530

Birth: 2025-06-30 21:03:33.212801893 +0530

```
[root@server ~]# cat newfile #read
```

redhat certified

```
[root@server ~]# stat newfile
```

File: newfile

Size: 18 Blocks: 8 IO Block: 4096 regular file

Device: fd00h/64768d Inode: 18662743 Links: 1

Access: (0644/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

Context: unconfined_u:object_r:admin_home_t:s0

Access: 2025-06-30 21:11:54.306782973 +0530

Modify: 2025-06-30 21:09:21.013788761 +0530

Change: 2025-06-30 21:09:21.013788761 +0530

Birth: 2025-06-30 21:03:33.212801893 +0530

```
[root@server ~]#
```

```
[root@server ~]#
```

```
[root@server ~]# #####
```

```
[root@server ~]#
```