cat command

cat command is used to read the data from files.

and it is also used to create files with data input

SYNTAX:

#cat <operator> <file name> → **create a file with data input**

<text> <enter>

ctrl+d → **to save and exit**

#cat <file name> → **read data of file**

#cat -n <file name> → **read file data with line no.**

OPERATOR:

> **single input redirector** → **overwrite**

>> **double input redirector** → **append**

EG:

[root@server ~]# **cat anaconda-ks.cfg** → read the file

Generated by Anaconda 34.25.0.29

Generated by pykickstart v3.32

#version=RHEL9

Use graphical install

graphical

repo --name="AppStream" --baseurl=file:///run/install/sources/mount-0000-cdrom/AppStream

%addon com_redhat_kdump --enable --reserve-mb='auto'

[root@server ~]#

[root@server ~]# cat -n anaconda-ks.cfg

1 # Generated by Anaconda 34.25.0.29

2 # Generated by pykickstart v3.32

```
    3       #version=RHEL9
    4       # Use graphical install
    5       graphical
    6       repo --name="AppStream" --baseurl=file:///run/install/sources/mount-0000-
cdrom/AppStream
    7
    8       %addon com_redhat_kdump --enable --reserve-mb='auto'
    9
   10       %end
   11
   12       # Keyboard layouts
   13       keyboard --xlayouts='us'
```

[root@server ~]# **cat /root/.bashrc**

```
# .bashrc

# Source global definitions
if [ -f /etc/bashrc ]; then
        . /etc/bashrc
fi

# User specific environment
if ! [[ "$PATH" =~ "$HOME/.local/bin:$HOME/bin:" ]]
then
    PATH="$HOME/.local/bin:$HOME/bin:$PATH"
fi
export PATH

# Uncomment the following line if you don't like systemctl's auto-paging feature:
# export SYSTEMD_PAGER=
```

User specific aliases and functions

alias rm='rm -i'

alias cp='cp -i'

alias mv='mv -i'

[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 ~]# **cat > sample1.txt**

HELLO world

Press (ctrl+d) → save and exit

[root@server ~]# ls

abc1 class1sectionB class3sectionB Music redhat test

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

abc2 class2sectionA Desktop Pictures rhel xyz1.txt

abc3 class2sectionB Documents Public sample xyz2.txt

anaconda-ks.cfg class2sectionC Downloads red sample1.txt xyz3.txt

class1sectionA class3sectionA file1 'red abc' Templates

[root@server ~]#

[root@server ~]# **cat sample1.txt**

HELLO world

[root@server ~]# **cat >> sample1.txt** → **use to append**

HELLO INDIA

Press (ctrl+d) → save and exit

[root@server ~]# **cat sample1.txt**

HELLO world

HELLO INDIA

[root@server ~]# **cat > sample1.txt** → **use to overwrite**

REDHAT CERTIFIED

[root@server ~]# **cat sample1.txt**

REDHAT CERTIFIED

[root@server ~]# **cat >> sample2.txt**

SYSTEM ADMINISTRATOR

Press (ctrl+d) → save and exit

[root@server ~]# **cat sample2.txt**

SYSTEM ADMINISTRATOR

[root@server ~]# **cat sample1.txt sample2.txt** → **read multiple files**

REDHAT CERTIFIED

SYSTEM ADMINISTRATOR

[root@server ~]# **cat sample2.txt sample1.txt**

SYSTEM ADMINISTRATOR

REDHAT CERTIFIED

[root@server ~]# **cat sample1.txt sample2.txt > sample3 →merge multiple file into single**

[root@server ~]# ls

abc1 class1sectionC Desktop Public sample1.txt xyz2.txt

abc{1...3} class2sectionA Documents red sample2.txt xyz3.txt

abc2 class2sectionB Downloads 'red abc' **sample3**

[root@server ~]# **cat sample3**

REDHAT CERTIFIED

SYSTEM ADMINISTRATOR

[root@server ~]# **cat >> sample3**

HELLO WORLD → tab space has been used

HELLO INDIA

[root@server ~]# **cat sample3**

REDHAT CERTIFIED

SYSTEM ADMINISTRATOR

HELLO   WORLD

HELLO INDIA

[root@server ~]# **cat -n sample3** → **print with line no.**

```
    1       REDHAT  CERTIFIED
    2
    3
    4       SYSTEM  ADMINISTRATOR
    5
    6       HELLO   WORLD
    7       HELLO INDIA
    8
```

[root@server ~]# **cat -E sample3** → **$ shows end of line**

```
REDHAT  CERTIFIED$
$
$
SYSTEM  ADMINISTRATOR$
$
HELLO   WORLD$
HELLO INDIA$
$
```

[root@server ~]# **cat -T sample3** → **show tab space used in file**

```
REDHAT  CERTIFIED
```

SYSTEM ADMINISTRATOR

HELLO^IWORLD

HELLO INDIA

REDIRECTOR

> (single input) --> overwrite

>> (dounle input) --> append

1> → output redirector (overwrite)

1>> → output redirector (append)

2> → error redirector (overwrite)

2>> → error redirector (append)

```
[root@server ~]# ls
abc1            class1sectionC  Desktop    Public      sample1.txt  xyz2.txt
abc{1...3}      class2sectionA  Documents  red         sample2.txt  xyz3.txt
abc2            class2sectionB  Downloads  'red abc'   sample3
abc3            class2sectionC  file1      redhat      Templates
anaconda-ks.cfg class3sectionA  Music      redhat.txt  test
class1sectionA  class3sectionB  newfile    rhel        Videos
class1sectionB  class3sectionC  Pictures   sample      xyz1.txt
[root@server ~]#
[root@server ~]# ls /
afs  data        etc   home  lib64  mnt   opt   redhat  sample  sys  var
bin  dev         file.txt  kali  media  net   proc  root  sbin  tmp  web.sh
boot  dhparams.pem  grras  lib  misc  nfsdata  red  run  srv  usr
```

[root@server ~]# **ls / /abcd** → ***there are two arguments for ls command one is giving output and the another is giving error***

ls: cannot access '/abcd': No such file or directory → **error**

/: → **output**

afs data etc home lib64 mnt opt redhat sample sys var

bin dev file.txt kali media net proc root sbin tmp web.sh

boot dhparams.pem grras lib misc nfsdata red run srv usr

[root@server ~]# **# ls / /abcd > lsoutput # output redirector**

[root@server ~]# **ls / /abcd 1> lsout** → ***output redirector redirects the output in file as an data***

ls: cannot access '/abcd': No such file or directory

[root@server ~]# ls

abc3 class2sectionC Public sample1.txt xyz2.txt

anaconda-ks.cfg class3sectionA file1 red sample2.txt xyz3.txt

class1sectionA class3sectionB **lsout** 'red abc' sample3

class1sectionB class3sectionC lsoutput redhat Templates

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

afs data etc home lib64 mnt opt redhat sample sys var

bin dev file.txt kali media net proc root sbin tmp web.sh

boot dhparams.pem grras lib misc nfsdata red run srv usr

[root@server **~]# ls / /abcd 2> error.txt** → ***error redirector redirects the error in file***

/:

afs data etc home lib64 mnt opt redhat sample sys var

bin dev file.txt kali media net proc root sbin tmp web.sh

boot dhparams.pem grras lib misc nfsdata red run srv usr

[root@server ~]# ls

.txt

abc3 class2sectionC **error.txt** Public sample1.txt xyz2.txt

class1sectionA class3sectionB lsout 'red abc' sample3

class1sectionB class3sectionC lsoutput redhat Templates

[root@server ~]# **cat error.txt**

ls: cannot access '/abcd': No such file or directory

[root@server ~]# **cat rehat.txt**

cat: rehat.txt: No such file or directory → *error of command* ***cat rehat.txt***

[root@server ~]# **cat rehat.txt 2>> error.txt** → *appending the new error to existing error file*

[root@server ~]# **cat error.txt**

ls: cannot access '/abcd': No such file or directory

cat: rehat.txt: No such file or directory

echo command

echo command is use to print. it is also use to add text to file and create a file. mostly used is shell scripting.

syntax:

#echo <string/sentance> → used to print

#echo <string/sentance> <operator> <file name> → use to add data in file

operator:

> → overwrite

>> → append

eg:

[root@server ~]# **echo redhat**

redhat

[root@server ~]# **echo "Redhat Certified System Administrator"**

Redhat Certified System Administrator

[root@server ~]# echo "Redhat:user"

Redhat:user

[root@server ~]# **echo {1..10}**

1 2 3 4 5 6 7 8 9 10

[root@server ~]# **echo {A..Z}**

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

[root@server ~]# **echo "Redhat:user@SYSTEM#admin"**

Redhat:user@SYSTEM#admin

[root@server ~]# **echo Redhat:user@SYSTEM #admin**

Redhat:user@SYSTEM

[root@server ~]# **echo "Redhat:user@SYSTEM #admin**

Redhat:user@SYSTEM #admin

[root@server ~]# echo "Redhat:user@SYSTEM #admin"

Redhat:user@SYSTEM #admin

[root@server ~]# **echo Redhat:user@SYSTEM \#admin** → → *need to print # in the sentence so user backslash (\) before the #*

Redhat:user@SYSTEM **#**admin

[root@server ~]# **echo Redhat:user@SYSTEM \#admin > echofile → create the with data**

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

abc2 class2sectionB Downloads newfile rhel Videos

abc3 class2sectionC **echofile** Pictures sample xyz1.txt

anaconda-ks.cfg class3sectionA error.txt Public sample1.txt xyz2.txt

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

Redhat:user@SYSTEM #admin

[root@server ~]# **echo {A..Z} >> echofile → append**

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

Redhat:user@SYSTEM #admin

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

[root@server ~]# **echo {1..100} > echofile → overwrite**

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

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

ECHO WITH ESCAPE SEQUENCE

-e → escape sequence

\n → new line

\t → horizontal tab

\c → continue

\v → vertical tab

\b → back space

EG:

[root@server ~]# **echo "HELLO USER, YOU ARE REDHAT CERTIFIED"**

HELLO USER, YOU ARE REDHAT CERTIFIED

[root@server ~]# **echo "HELLO USER,\nYOU ARE \nREDHAT CERTIFIED"**

HELLO USER,\nYOU ARE \nREDHAT CERTIFIED

[root@server ~]# **echo -e "HELLO USER,\nYOU ARE \nREDHAT CERTIFIED\n"**

HELLO USER,

YOU ARE

REDHAT CERTIFIED

[root@server ~]# **echo -e "HELLO USER,\tYOU ARE \tREDHAT CERTIFIED\n"**

HELLO USER, YOU ARE REDHAT CERTIFIED

[root@server ~]# **echo -e "HELLO USER,\vYOU ARE \vREDHAT CERTIFIED\n"**

HELLO USER,

YOU ARE

REDHAT CERTIFIED

[root@server ~]# **echo -e "HELLO USER,\b YOU ARE\b REDHAT CERTIFIED\b "**

HELLO USER YOU AR REDHAT CERTIFIE

[root@server ~]# echo -e "HELLO USER,\v YOU\t ARE\n REDHAT CERTIFIED\b "

HELLO USER,

YOU ARE

REDHAT CERTIFIE

[root@server ~]# **echo -n "HELLO USER,\v YOU\t ARE\n REDHAT CERTIFIED\b "**

HELLO USER,\v YOU\t ARE\n REDHAT CERTIFIED\b [root@server ~]#

[root@server ~]# echo -e "HELLO USER,\c YOU ARE\c REDHAT CERTIFIED\c "

HELLO USER,[root@server ~]#

[root@server ~]# **echo hello ; echo world**

hello

world

[root@server ~]# **echo -e "hello \c " ; echo world**

hello world

[root@server ~]# **echo -e "hello \c" ; echo world**

hello world

```
[root@server ~]# echo -n  "hello " ;  echo  world
hello world

[root@server ~]# echo -n  "hello " ;  echo  world
[root@server ~]# echo -e  "hello \c"   ;  ls
hello    abc1          class1sectionC  Desktop    lsoutput  redhat      Templates
abc{1...3}      class2sectionA  Documents  Music     redhat.txt   test
abc2          class2sectionB  Downloads  newfile   rhel        Videos
abc3          class2sectionC  echofile   Pictures  sample      xyz1.txt
anaconda-ks.cfg  class3sectionA  error.txt  Public    sample1.txt  xyz2.txt
class1sectionA   class3sectionB  file1      red       sample2.txt  xyz3.txt
class1sectionB   class3sectionC  lsout      'red abc'  sample3

[root@server ~]# echo   "hello"   ;  ls
hello
abc1          class1sectionC  Desktop    lsoutput  redhat      Templates
abc{1...3}      class2sectionA  Documents  Music     redhat.txt   test
abc2          class2sectionB  Downloads  newfile   rhel        Videos
abc3          class2sectionC  echofile   Pictures  sample      xyz1.txt
anaconda-ks.cfg  class3sectionA  error.txt  Public    sample1.txt  xyz2.txt
class1sectionA   class3sectionB  file1      red       sample2.txt  xyz3.txt
class1sectionB   class3sectionC  lsout      'red abc'  sample3



[root@server ~]# echo   "hello"   ;  touch  class.txt   ;  ls     ; cd  /
hello
abc1          class1sectionC  class.txt  lsout     'red abc'     sample3
abc{1...3}      class2sectionA  Desktop    lsoutput  redhat      Templates
```

```
 abc2            class2sectionB   Documents   Music     redhat.txt    test
 abc3            class2sectionC   Downloads   newfile   rhel          Videos
 anaconda-ks.cfg class3sectionA   echofile    Pictures  sample        xyz1.txt
 class1sectionA  class3sectionB   error.txt   Public    sample1.txt   xyz2.txt
 class1sectionB  class3sectionC   file1       red       sample2.txt   xyz3.txt
[root@server /]#
[root@server /]#
[root@server /]# cd
```

```
[root@server ~]# echo  "hello"
hello
 [root@server ~]# echo   $0
bash
 [root@server ~]# echo   $SHELL
/bin/bash
 [root@server ~]# echo   $HOME
/root
 [root@server ~]# echo   $HOSTNAME
server.example.com
 [root@server ~]# echo   $USER
root
 [root@server ~]# echo   $PWD
/root
[root@server ~]#
```