

## Assignment No.1

### Basic UNIX Commands/General Purposse Utility Commands

- **cal**

To display a calendar.

A single parameter specifies the 4 digit year (1 - 9999) to be displayed. Two parameters denote the Month (1 - 12) and Year (1 - 9999). If arguments are not specified, the current month is displayed. A year starts on 01 Jan.

Tag	Description
-m	Display monday as the first day of the week.
-j	Display julian dates (days one-based, numbered from January 1).
-y	Display a calendar for the current year.

### EXAMPLES:

To display current month's calendar

```
$ cal
    April 2016
Su Mo Tu We Th Fr Sa
                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
```

To display feb 2015 calendar

```
$ cal 2 2015
    February 2015
Su Mo Tu We Th Fr Sa
```

```

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

```

- **date**

Use to display system date.

**Example:**

1. *\$date*

*Tue Jul 05 09:58:19 IST 2016*

2. *\$date +%m*

*07*

3. *\$date +%h*

*Jul*

4. *\$date +"%h %m"*

*Jul 05*

**Exercise: Explore other options available with date**

- **echo**

Use to display a message

**EXAMPLE:**

1. *\$echo "hello good morning"*

*hello good morning*

2. *\$echo "hello Good evening"*

*Hello Good evening*

- **bc**

Use as a calculator

**Example:**

1. *\$bc*

*12 + 5*

*17*

2. *\$bc*  
*12 \* 12*  
*144*

3. *\$bc*  
*9/5*  
*1*

4. *\$bc*  
*Scale=2*  
*17/7*  
*2.42*

- **script**

Use to record the session

Syntax:

Script [filename]

EXAMPLE:

1. *\$script file1*  
*Script started, file is typescript*
2. *\$exit*  
*Script is done, file is typescript*

- **passwd**

Used to change the password

EXAMPLE:

```
$ passwd
passwd: Changing password for kumar
Enter login password: *****
New password: *****
Re-enter new password: *****
passwd (SYSTEM): passwd successfully changed for kumar
```

*Asks for old password*

- **who**

Give listing of users.

EXAMPLE:

```
$ who
root      console    Aug  1 07:51    (:0)
kumar     pts/10       Aug  1 07:56    (pc123.heavens.com)
sharma    pts/6        Aug  1 02:10    (pc125.heavens.com)
project   pts/8        Aug  1 02:16    (pc125.heavens.com)
sachin    pts/14       Aug  1 08:36    (mercury.heavens.com)
```

### To know the current user

```
$ who am i
kumar     pts/10       Aug  1 07:56    (pc123.heavens.com)
```

- **uname**  
Simply displays name of the operating system

### EXAMPLE:

```
$ uname
SunOS
```

*Linux shows Linux*

```
$ uname -r
5.8
```

*This is SunOS 5.8*

- **tty**  
Give details about terminal  
Needs no argument value

### EXAMPLE:

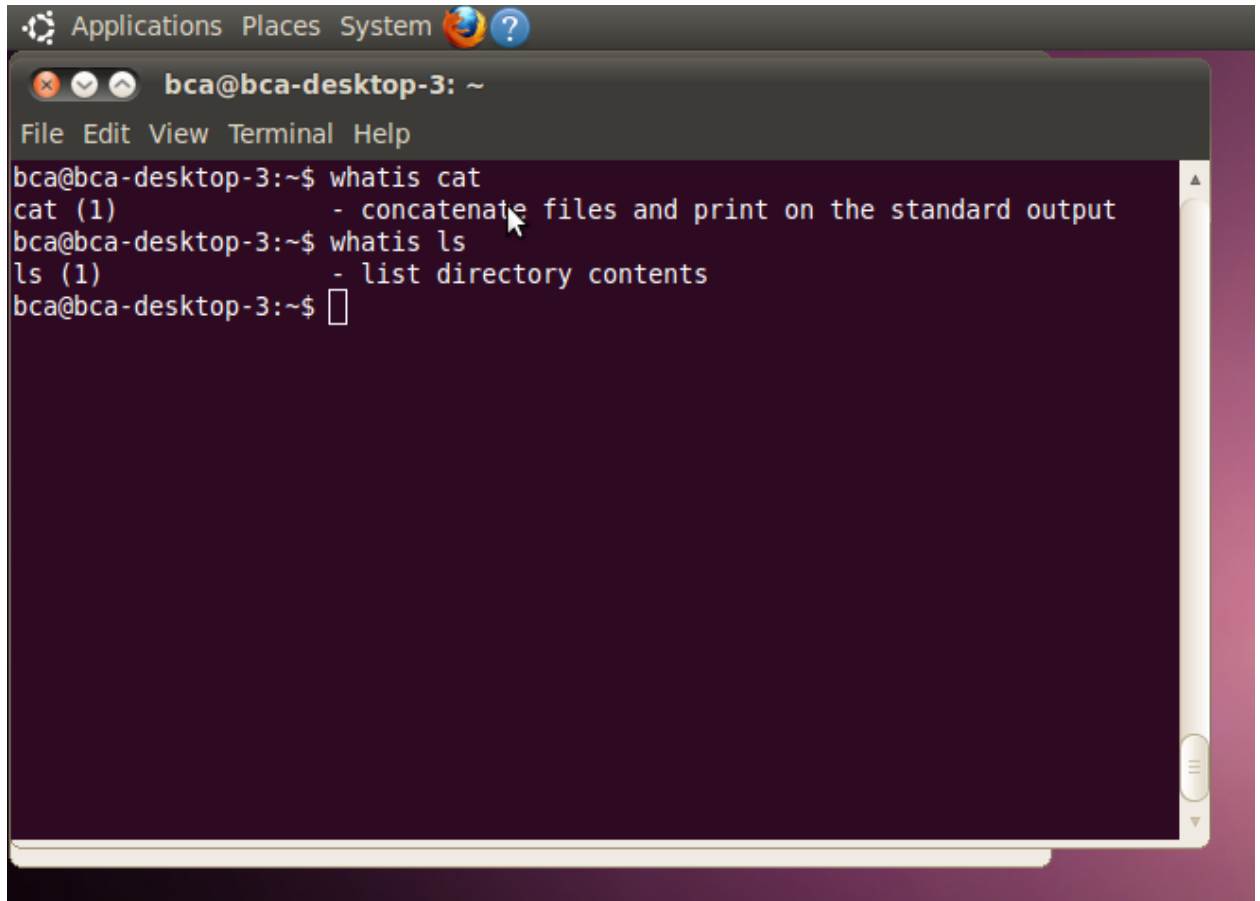
```
$ tty
/dev/pts/10
```

- **clear**  
to clear terminal window
- **man command**  
Provides help on command  
Eg. man cat
- **whatis:**  
Displays use of command

**Same as man -f command**

**Eg.**

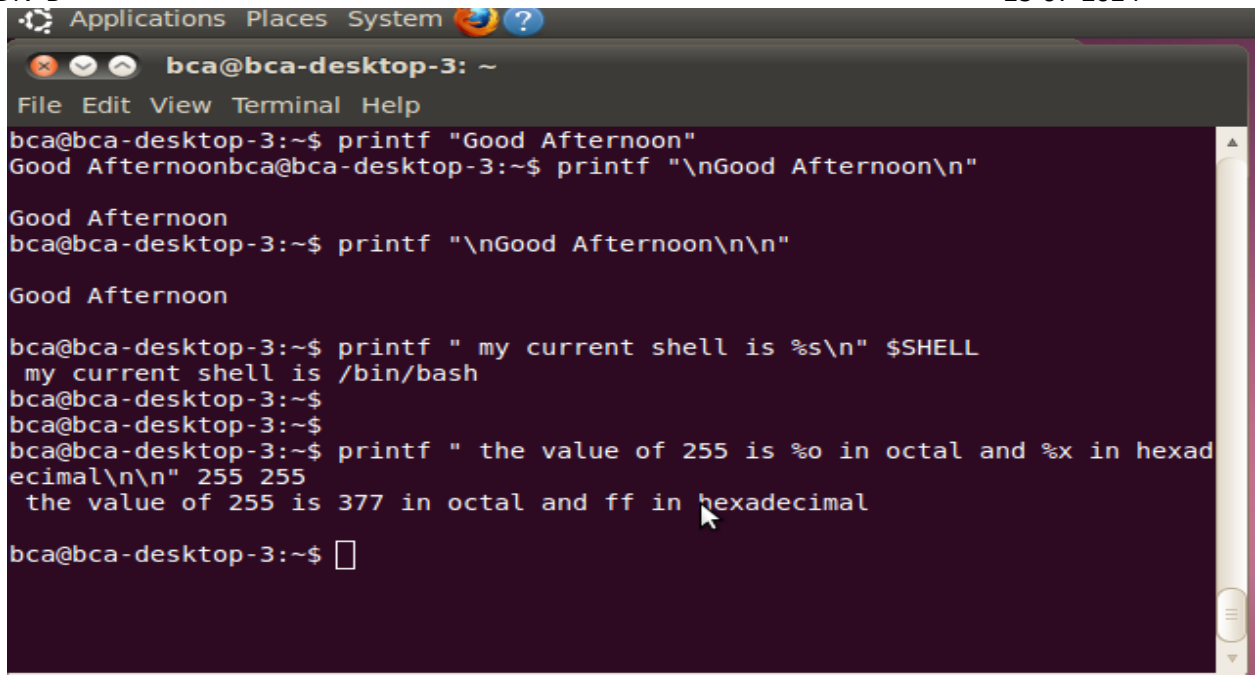
- 1) whatis cat**
- 2) whatis cp**



The screenshot shows a terminal window titled 'bca@bca-desktop-3: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Terminal', and 'Help'. The terminal output is as follows:

```
bca@bca-desktop-3:~$ whatis cat
cat (1)          - concatenate files and print on the standard output
bca@bca-desktop-3:~$ whatis ls
ls (1)           - list directory contents
bca@bca-desktop-3:~$
```

- **printf**  
**Alternative of echo**  
**Available only with Bash Shell**



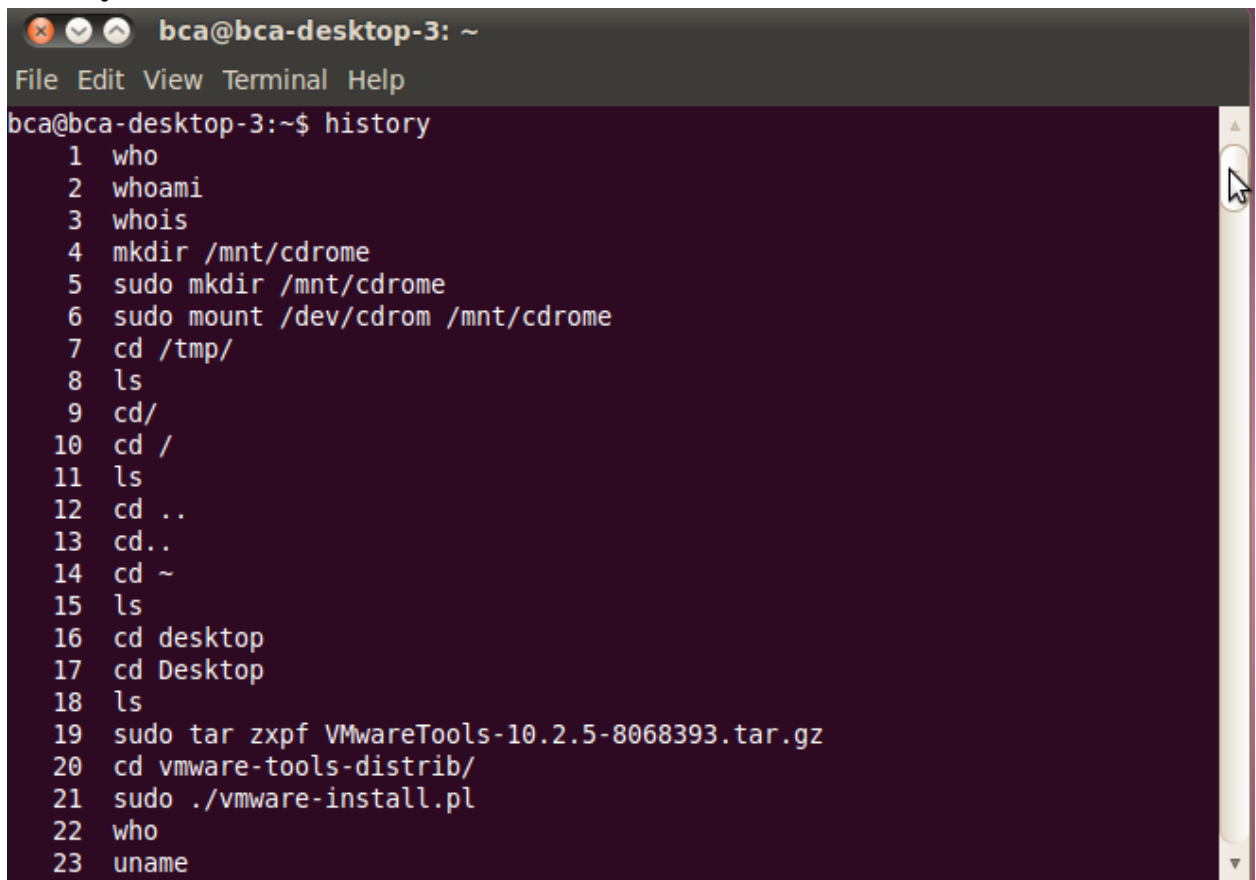
```
Applications Places System ?
bca@bca-desktop-3: ~
File Edit View Terminal Help
bca@bca-desktop-3:~$ printf "Good Afternoon"
Good Afternoonbca@bca-desktop-3:~$ printf "\nGood Afternoon\n"

Good Afternoon
bca@bca-desktop-3:~$ printf "\nGood Afternoon\n\n"

Good Afternoon

bca@bca-desktop-3:~$ printf " my current shell is %s\n" $SHELL
 my current shell is /bin/bash
bca@bca-desktop-3:~$
bca@bca-desktop-3:~$
bca@bca-desktop-3:~$ printf " the value of 255 is %o in octal and %x in hexadecimal\n\n" 255 255
 the value of 255 is 377 in octal and ff in hexadecimal
bca@bca-desktop-3:~$
```

- **history**



```
bca@bca-desktop-3: ~
File Edit View Terminal Help
bca@bca-desktop-3:~$ history
 1  who
 2  whoami
 3  whois
 4  mkdir /mnt/cdrome
 5  sudo mkdir /mnt/cdrome
 6  sudo mount /dev/cdrom /mnt/cdrome
 7  cd /tmp/
 8  ls
 9  cd/
10  cd /
11  ls
12  cd ..
13  cd..
14  cd ~
15  ls
16  cd desktop
17  cd Desktop
18  ls
19  sudo tar xzpf VMwareTools-10.2.5-8068393.tar.gz
20  cd vmware-tools-distrib/
21  sudo ./vmware-install.pl
22  who
23  uname
```

```
bca@bca-desktop-3: ~  
File Edit View Terminal Help  
375 whatis cat  
376 man -f cat  
377 clear  
378 printf "fhudfdf"  
379 printf fhudfdf  
380 clear  
381 printf "the binary value 8 is %b" 8  
382 printf "the binary value 8 is %b" 16  
383 clear  
384 history  
385 history 10  
386 exit  
387 history  
388 histsize=1200  
389 histsize=5  
390 history  
bca@bca-desktop-3:~$ HISTSIZE=5  
bca@bca-desktop-3:~$ history  
387 histsize=1200  
388 histsize=5  
389 history  
390 HISTSIZE=5  
391 history  
bca@bca-desktop-3:~$
```

- **stty**  
displays and setting terminal characteristics

```
bca@bca-desktop-3: ~  
File Edit View Terminal Help  
bca@bca-desktop-3:~$ stty -a  
speed 38400 baud; rows 24; columns 80; line = 0;  
intr = ^C; quit = ^\; erase = ^?; kill = ^U; eof = ^D; eol = M-^?; eol2 = M-^?;  
swtch = M-^?; start = ^Q; stop = ^S; susp = ^Z; rprnt = ^R; werase = ^W;  
lnext = ^V; flush = ^O; min = 1; time = 0;  
-parenb -parodd cs8 hupcl -cstopb cread -clocal -crtscts  
-ignbrk brkint -ignpar -parmrk -inpck -istrip -inlcr -igncr icrnl ixon -ixoff  
-iuclc ixany imaxbel iutf8  
opost -olcuc -ocrnl onlcr -onocr -onlret -ofill -ofdel nl0 cr0 tab0 bs0 vt0 ff0  
isig icanon iexten echo echoe echok -echonl -noflsh -xcase -tostop -echoprt  
echoctl echoke  
bca@bca-desktop-3:~$ stty -echo  
bca@bca-desktop-3:~$          July 2023  
Su Mo Tu We Th Fr Sa  
          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  
bca@bca-desktop-3:~$ Fri Jul  7 12:00:18 IST 2023  
bca@bca-desktop-3:~$ bca@bca-desktop-3:~$ stty: invalid argument '-echodate'  
Try 'stty --help' for more information.  
bca@bca-desktop-3:~$ bca@bca-desktop-3:~$ cat
```