Permission  
  
-rwxr-xr-x  1 root root 731 Jul 30 17:53 permissions  
  
owner   grp     others  
-rw- r-- r--    1 root root    5161 Jan 11 13:46 usradmin.rtf  
  
read  = 4  
write = 2  
exe = 1   
  
  
  
chmod 777 /  
chmod u=rwx,g=rwx,o=rwx  /  
  
chmod u-rwx,g-rwx,o-rwx  /  
chmod u+rwx,g+rwx,o+rwx  /  
  
  
= overwrite  
- remove  
+ append  
  
  
chmod ugo=rwx perm  
###############################################################################  
 changing ownership of folder or file  
  
 chown owner   
 chown sam backup   
  
Note :- In above example sam is an owner of backup folder  
  
 chown owner.groupowner    
 chown owner:groupowner    
  
 chown sameer.sameer backup  
 chown sameer:sameer backup   
  
###########################################################################   
 changing group ownership of folder or file  
  
 chgrp grpname   
 chgrp sam backup  
  
###########################################################################  
  
Special permissions  
  
  
Setuid  :-  4  
SetGID :- 2  
Stickybit :- 1  
  
Live setuid example :-  
  
chmod 4511  
  
  
-r-s--x--x  1 root root 19336 Sep  7  2004 /usr/bin/passwd  
  
-r--------  1 root root 1764 Jan 11 15:31 /etc/shadow  
  
setgid example  
------------------  
  
chmod 2070 /project  
  
set sticky bit  
-----------------------  
  
chmod o+t /project  
  
  
  
  
  
##############################################################################  
  
 umask permission  
  
Default permission for files is  :- 666   
Default permission for folder is :- 777  
  
    - how to check above statement use following command :-  
  
 umask 000  
  
Then create one folder and file and those permission  
  
  
Note : - Default umask permission for superuser (root) is 022  
  
   666 777  
 - 022         - 022   
 --------      --------   
   644 755  
   
files   ---> -rw-r--r--   ---> if umask is 022  
folders ---> drwxr-xr-x   ---> if umask is 022  
  
  
Note : - Default umask permission for any normal user is 002  
           
 666 777  
      - 002       - 002  
     --------       ----------  
        664             775  
        
  
files   ---> -rw-rw-r--   ---> if umask is 002  
folders ---> drwxrwxr-x   ---> if umask is 002  
  
Note : - To set individual umask you need to set in users /home/sameer/.bashrc  
      For the umask one file is given which is vim /etc/bashrc file  
       to run this file use source /etc/bashrc

Special permission:

Setuid  --> 4  
 -------------  
Setuid is assigned on binaries.  
  
When setuid(4) is assigned on any binary, whatever permissions are given to owner of that binary will be temporarily assigned to the user who is running that binary.  
  
eg -> rwsr-xr-x  --> /usr/bin/passwd  
  
These are the permissions of /usr/bin/passwd binary. Here owner of binary is  
root, who is having rwx permissions with this setuid is also assigned therefore  
permissions of owner are -> rws . Because of this setuid (s-->4) when normal  
user will run a binary passwd only for a temporary time rwx permissions of root are assigned to normal user which is allowing normal user to change their own  
password.  
  
===============================================================================  
   
 SetGid --> 2  
 ------------  
1> create folder  /project  
2> create group sysadmin  
3> create users natasha, pooja, these users are members of sysadmin group  
4> blank permissions are given to other members  
5> group ownership of /project folder should be beloging to sysadmin group  
5> Only read, write and executable by sysadmin group.  
6> sysadmin group members should be able to connect to a /project folder  
8> Any file created by sysadmin group members under /project folder should be  
   owned by group sysadmin group.