umask: 0022

root
uid: 0

linux operating
system machine

umask:0002 umask:0002

mike   rick
[normal
user]

Default max permissions:
For a File linux operating system is 666, because Linux dont want to have execute permission on a File by default due to security reasons

For Folder linux operation system is 777, because (execute permission) on a folder is cd (change directory)

The umask variable value of a user is being used to derive the default permission that is assigned to a File or Folder as below

For a file
1. Take the umask variable value of an user
max permission: 666
normal user   :   0002
                  ____
                  0664 = rw-rw-r--
                  ____

For a folder
max permission: 777
normal user (umask):0002
                    ____
                    0775 = rwxrwxr-x
                    ____

The first '0' in the umask indicates the number is an octal number

For a root user the umask: 0022, so the default permissions assigned to a File or Folder when a root creates is different than normal user

File default permissions:
 File Max Permission: 666   Folder Max permission: 777
      Root UMask   : 0022   Root UMask   : 0022
               ____   ____
               0644 = rw-r--r--   0755 = rwxr-xr-x
               ____   ____

How to know what is the umask value of a user?
umask
used for printing the default umask value for an user