1. Create folder /myapp and file app.py inside /myapp with permission as given below -

     drwxrwx---    root  ubuntu   /myapp

     \_rw-rw----     root  ubuntu  /myapp/app.py

First way :

root@ip-172-31-26-56:~# mkdir /myapp

root@ip-172-31-26-56:/# cd myapp/

root@ip-172-31-26-56:/myapp# ll

total 8

drwxr-xr-x 2 root root 4096 Dec 22 13:51 ./

drwxr-xr-x 29 root root 4096 Dec 22 13:51 ../

root@ip-172-31-26-56:/myapp# chmod 770 /myapp/

root@ip-172-31-26-56:/myapp# ll

total 8

drwxrwx--- 2 root root 4096 Dec 22 13:51 ./

drwxr-xr-x 29 root root 4096 Dec 22 13:51 ../

root@ip-172-31-26-56:/myapp# chmod 660 app.py

root@ip-172-31-26-56:/myapp# ll

total 8

drwxrwx--- 2 root root 4096 Dec 22 13:56 ./

drwxr-xr-x 29 root root 4096 Dec 22 13:51 ../

-rw-rw---- 1 root root 0 Dec 22 13:56 app.py

root@ip-172-31-26-56:/myapp# chown .ubuntu /myapp

root@ip-172-31-26-56:/myapp# chown .ubuntu app.py

root@ip-172-31-26-56:/myapp# ll

total 8

drwxrwx--- 2 root ubuntu 4096 Dec 22 14:06 ./

drwxr-xr-x 29 root root 4096 Dec 22 13:51 ../

-rw-rw---- 1 root ubuntu 0 Dec 22 13:56 app.py

Second way :-

root@ip-172-31-26-56:/myapp# bindfs -u root -g ubuntu -p u=rwD,g=rwx,o= demo demo

root@ip-172-31-26-56:/myapp# ls -l

total 4

-rw-rw---- 1 root ubuntu 0 Dec 22 13:56 app.py

drwxrwx--- 2 root ubuntu 4096 Dec 22 18:03 demo

    Add user nikhil in the server with /home/nikhil home directory

ubuntu@ip-172-31-26-56:/myapp$ sudo adduser suraj

Adding user `suraj' ...

Adding new group `suraj' (1004) ...

Adding new user `suraj' (1004) with group `suraj' ...

Creating home directory `/home/suraj' ...

Copying files from `/etc/skel' ...

New password:

Retype new password:

passwd: password updated successfully

Changing the user information for suraj

Enter the new value, or press ENTER for the default

Full Name []:

Room Number []:

Work Phone []:

Home Phone []:

Other []:

Is the information correct? [Y/n] y

ubuntu@ip-172-31-26-56:/myapp$ sudo su suraj

suraj@ip-172-31-26-56:/myapp$ cd

suraj@ip-172-31-26-56:~$ pwd

/home/suraj

root@ip-172-31-26-56:/home/suraj# adduser sudo suraj

suraj@ip-172-31-26-56:~$

    Setup appropriate permission/ownership to the folder /myapp that enables nikhil to create files inside that folder but not able to modify the app.py

suraj@ip-172-31-26-56:/$ sudo setfacl -m u:suraj:rwx /myapp

suraj@ip-172-31-26-56:/$ ls –l

drwxrwx---+ 3 root ubuntu 4096 Dec 23 16:12 myapp

suraj@ip-172-31-26-56:/$ cd myapp

suraj@ip-172-31-26-56:/myapp$ touch suraj.txt

suraj@ip-172-31-26-56:/myapp$ ls -l

total 8

-rw-rw---- 1 root ubuntu 6 Dec 23 07:05 app.py

drwxrw-rwx 2 root ubuntu 4096 Dec 23 03:11 demo

-rw-rw-r-- 1 suraj suraj 0 Dec 23 16:25 suraj.txt

-rw-rw-r-- 1 ubuntu ubuntu 0 Dec 23 16:12 test.txt