Mini project on Hospital staff

```
class Hospital():

    totalstaff = 0

    def __init__(self,First,Last,Home_Location,Age,Bldgrp):

        self.first = First
        self.last = Last
        self.location = Home_Location
        self.age = Age
        self.bldgrp = Bldgrp

        Hospital.totalstaff +=1

    def fullname(self):
        return f'{self.first} {self.last}'.title()

    def place(self):
        return f'{self.location}'.title()

    def numyears(self):
        return int(self.age)

    def bloodgroup(self):
        return f'{self.bldgrp} '


staff1 = Hospital('rajesh','shirke','sakinaka',28,'A+')
staff2 = Hospital('vijay','pawar','andheri',37,'B+')




class Nurse(Hospital):
    totalnurse = 0


    def __init__(self,First,Last,Home_Location,Age,Bldgrp,Time):

        super().__init__(First,Last,Home_Location,Age,Bldgrp)


        self.time = Time

        Nurse.totalnurse +=1



  def punch_timing(self):
```

```
        if self.time == 6 :
            return (f'{self.time}a.m. is first shift')

        elif self.time == 15 :
            return (f'{self.time}p.m is second shift')

        else:
            return (f'{self.time}p.m is night shift')



nurs1 = Nurse('shobha','shinde','dombivali',39,'A+',6)

nurs2 = Nurse('Sonali','shete','parel',30,'B-',15)

nurs3 = Nurse('shubhra','jadhav','vikroli',45,'AB+',20)



class Doctor (Hospital):
    totaldocs = 0


    def __init__(self,First,Last,Home_Location,Age,Bldgrp,Spl,nurses=None):

        super().__init__(First,Last,Home_Location,Age,Bldgrp)

        self.spl = Spl

        Doctor.totaldocs +=1

        if (nurses is None):
            self.nurse = []

        else:
            self.nurse = nurses



    def specialist(self):
        return f'{self.spl}'.title()

    def addnurse(self,nur):
        if (nur not in self.nurse):
            self.nurse.append(nur)

    def removenurse(self,nur):
        if (nur in self.nurse):
            self.nurse.remove(nur)
```

```
    def printnurse(self):
        for nur in self.nurse:
            print("-->",nur.fullname())



doc1 = Doctor("sanvi","nighut", 'ghatkoper',28,'O+','Cardiac',[nurs1])
doc2 = Doctor("nupur","palav", 'thane',31,'B+','ENT',[nurs3])
doc3 = Doctor("parnika",'shinde','mulund',32,'A+','Pediatrician',[nurs2])
```

output by running the project:

```
==== RESTART: C:\Users\user\AppData\Local\Programs\Python\Python38\study.py ====
>>> staff1.fullname()
'Rajesh Shirke'

>>> staff1.place()
'Sakinaka'

>>> staff2.numyears()
37

>>> staff2.bloodgroup()
'B+ '

>>> nurs1.punch_timing()
'6a.m. is first shift'

>>> nurs2.fullname()
'Sonali Shete'

>>> nurs3.place()
'Vikroli'

>>> nurs1.numyears()
39

>>> nurs2.bloodgroup()
'B- '

>>> staff1.totalstaff
8

>>> nurs1.totalnurse
3

>>> doc1.numyears()
```

```
>>> doc2.fullname()
'Nupur Palav'

>>> doc3.specialist()
'Pediatrician'

>>> doc1.fullname()
'Sanvi Nighut'

>>> doc2.place()
'Thane'

>>> doc3.bloodgroup()
'A+ '


>>> doc2.printnurse()
--> Shubhra Jadhav

>>> doc1.totaldocs
3
>>>

>>> doc3.removenurse(nurs2)
>>> doc3.printnurse()

>>> doc3.addnurse(nurs2)

>>> doc3.printnurse()
--> Sonali Shete

>>> doc1.addnurse(nurs3)

>>> doc1.printnurse()
--> Shobha Shinde
--> Shubhra Jadhav
```