PROGRAMMING LAB

BLESSY P ROY

MCA S1

TKM20MCA-2014

Question

Create a class 'Nurses' with data members id,name,salary, Qualification,covid duty [yes,No] dept, and constructors to initialize the data member create. Another class 'Doctors' with its own data members -name , specialisation,salar,covid duty,[yes,no] ,dept and constructors initialize these data members create another class hospital that inherit the above two classes with constructors for initializing attributes of members and it has an unique hospital id. All classes include display functions to display all the data members.create an instance of hospital showing the list of doctors and nurses engaged in covid duty.

Algorithm

Step 1: Create the class Nurses with data and Doctors with data.

Step 2:Create another class Hospital with data.

Step 3:Hospital class Inherit the Nurse and Doctor class with a constructor.

Step 4:Initialize the attribute of members and its unique id.

Step 5:Display all the class data.

Step 6:Display list of doctors and nurses engaged in covid duty.

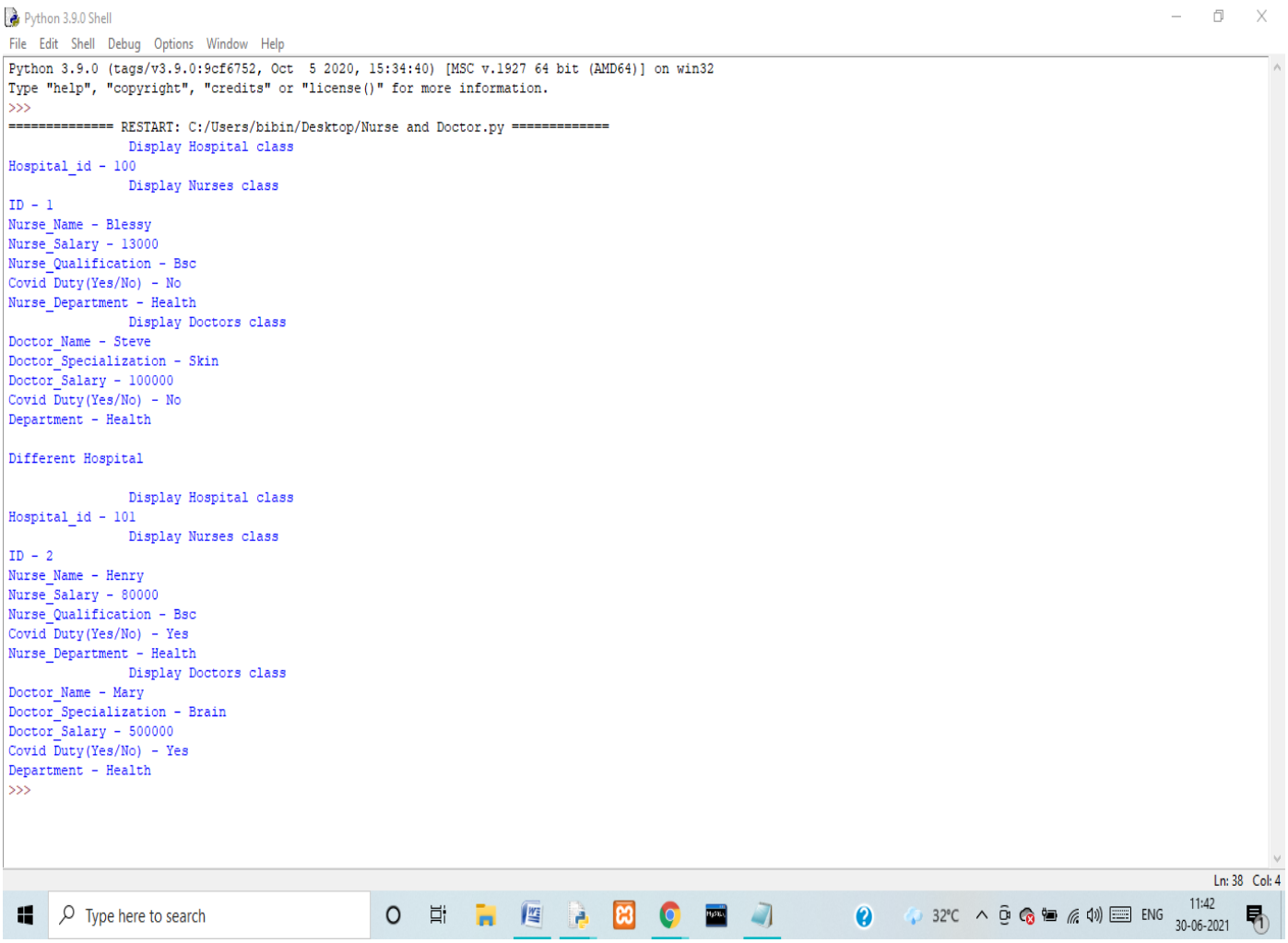
PROGRAM

```
class Nurses:

    Nurse_id = ''

    Nurse_Name = ''

    Nurse_Salary = ''

    Nurse_Qualification = ''

    Nurse_Covid_duty = ''

    Nurse_Department = ''


    def
__init__(self,Nurse_id,Nurse_Name,Nurse_Salary,Nurse_Qualification,Nurse_Covid_duty,N
urse_Department):

        self.Nurse_id = Nurse_id

        self.Nurse_Name = Nurse_Name

        self.Nurse_Salary = Nurse_Salary

        self.Nurse_Qualification = Nurse_Qualification

        self.Nurse_Covid_duty = Nurse_Covid_duty

        self.Nurse_Department = Nurse_Department

    def display(self):

        print("\t\tDisplay Nurses class")

        print("ID - "+self.Nurse_id)

        print("Nurse_Name - "+self.Nurse_Name)

        print("Nurse_Salary - "+self.Nurse_Salary)

        print("Nurse_Qualification - "+self.Nurse_Qualification)

        print("Covid Duty(Yes/No) - "+self.Nurse_Covid_duty)
```

```
        print("Nurse_Department - "+self.Nurse_Department)



class Doctors:
    Doctor_Name = ''
    Doctor_Specialization = ''
    Doctor_Salary = ''
    Doctor_Covid_duty = ''
    Doctor_Dept = ''
    def
__init__(self,Doctor_Name,Doctor_Specialization,Doctor_Salary,Doctor_Covid_duty,Doctor
_Dept):
        self.Doctor_Name = Doctor_Name
        self.Doctor_Specialization = Doctor_Specialization
        self.Doctor_Salary = Doctor_Salary
        self.Doctor_Covid_duty = Doctor_Covid_duty
        self.Doctor_Dept = Doctor_Dept
    def display(self):
        print("\t\tDisplay Doctors class")
        print("Doctor_Name - "+self.Doctor_Name)
        print("Doctor_Specialization - "+self.Doctor_Specialization)
        print("Doctor_Salary - "+self.Doctor_Salary)
        print("Covid Duty(Yes/No) - "+self.Doctor_Covid_duty)
        print("Department - "+self.Doctor_Dept)
```

```
class Hospital(Nurses,Doctors):

    hospital_id = ''

    def
__init__(self,hospital_id,Nurse_id,Nurse_Name,Nurse_Salary,Nurse_Qualification,Nurse_Co
vid_duty,Nurse_Department,Doctor_Name,Doctor_Specialization,Doctor_Salary,Doctor_Co
vid_duty,Doctor_Dept):

        self.hospital_id = hospital_id


Nurses.__init__(self,Nurse_id,Nurse_Name,Nurse_Salary,Nurse_Qualification,Nurse_Covid
_duty,Nurse_Department)


Doctors.__init__(self,Doctor_Name,Doctor_Specialization,Doctor_Salary,Doctor_Covid_dut
y,Doctor_Dept)

    def display(self):

        print("\t\tDisplay Hospital class")

        print("Hospital_id - "+self.hospital_id)



        Nurses.display(self)



        Doctors.display(self)

obj1 = Hospital('100','1','Blessy','13000','Bsc','No','Health','Steve','Skin','100000','No','Health')

obj1.display()

print("\nDifferent Hospital\n")

obj2 =
Hospital('101','2','Henry','80000','Bsc','Yes','Health','Mary','Brain','500000','Yes','Health')

obj2.display()
```

OUTPUT


Python 3.9.0 Shell
File Edit Shell Debug Options Window Help
Python 3.9.0 (tags/v3.9.0:9cf6752, Oct 5 2020, 15:34:40) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:/Users/bibin/Desktop/Nurse and Doctor.py ==========
Display Hospital class
Hospital_id - 100
Display Nurses class
ID - 1
Nurse_Name - Blessy
Nurse_Salary - 13000
Nurse_Qualification - Bsc
Covid Duty(Yes/No) - No
Nurse_Department - Health
Display Doctors class
Doctor_Name - Steve
Doctor_Specialization - Skin
Doctor_Salary - 100000
Covid Duty(Yes/No) - No
Department - Health
Different Hospital
Display Hospital class
Hospital_id - 101
Display Nurses class
ID - 2
Nurse_Name - Henry
Nurse_Salary - 80000
Nurse_Qualification - Bsc
Covid Duty(Yes/No) - Yes
Nurse_Department - Health
Display Doctors class
Doctor_Name - Mary
Doctor_Specialization - Brain
Doctor_Salary - 500000
Covid Duty(Yes/No) - Yes
Department - Health
>>>
Ln: 38 Col: 4
Type here to search
32°C
ENG
11:42
30-06-2021