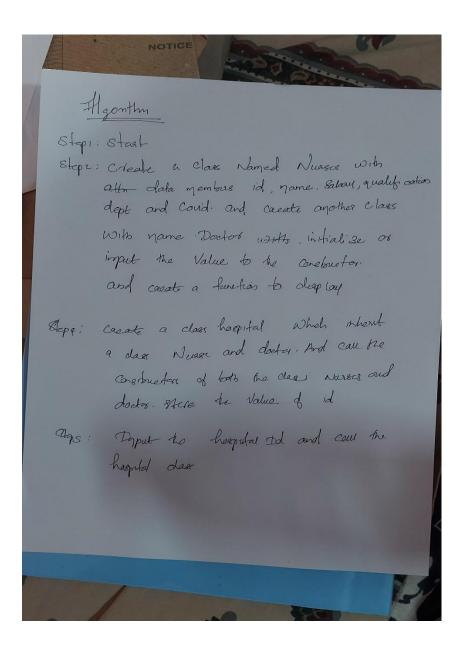**S1 EXTERNAL LAB EXAMINATION**

PROGRAMMING LAB

SUBMITTED BY:

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MCA S1

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QUESTION:

Create a class nurses with data members id,name, salary, qualification,covid duty,department and a constructor to initialise them.Create another class Doctor with data members name,specialisation, salary, covid duty, department and a constructor to initialise them. Create a class Hospital derived from Nurses and Doctor with data member hospital id . Each class should have there own display function to display details. Create an object of Hospital and print the details of doctors and nurses engaged in covid duty

ALGORITHM

Algorithm

Step1: Start

Step2: Create a class Named Nurses with attr data members id, name, salary, qualification dept and Covid. and create another class with name Doctor with. initialise or input the value to the constructor. and create a function to display

Step4: create a class hospital which inherit a class Nurse and doctor. And call the constructor of both the class Nurses and doctor. store the value of id

Step5: Input the hospital Id and call the hospital class

PROGRAM CODE

```python
class Nurses:

    def __init__(self):

        self.nid=int(input("enter the id"))

        self.name=input("Enter the name")

        self.salary=int(input("enter the salary"))

        self.qualification=input("enter the qualificaton")

        self.dept=input("Enter the department")

        self.covid=input("ARE YOU ENGAGED IN COVID DUTY(YES/NO)")


    def display(self):
        print("id", self.nid)
        print("Nurse Name:",self.name)
        print("SALARY:",self.salary)
        print("Qualification",self.qualification)
        print("Dept",self.dept)
        print("ON COVID DUTY",self.covid)


class Doctor:

    def __init__(self):

        self.Dname=input("enter the Doctor name:")
        self.Dsalary=int(input("Enter the salary"))
        self.Dspec=input("specialization:")
        self.Ddept=input("Enter the department")
        self.Dcovid=input("ARE YOU ENGAGED IN COVID DUTY(YES/NO)")
```

```python
    def display(self):

        print("Name of the Doctor",self.Dname)

        print("Specialized in:",self.Dsalary)

        print("salary",self.Dspec)

        print("Department:",self.Ddept)

        print("ON COVID DUTY",self.Dcovid)
class hospital(Nurses,Doctor):


    def __init__(self,id):
        Doctor.__init__(self)
        Nurses.__init__(self)
        self.h_id=id


    def display(self):
        if(self.d_covid=='Yes'):
            print("Doctor Name is:",self.Dname)
        if(self.n_covid=='Yes'):
            print("Nurse Name is:",self.name)


id1 =int(input("Enter the hospital ID"))
h1=hospital(id1)
id2 =int(input("Enter the hospital ID"))
h2=hospital(id2)
q=int(input("Enter the hospital id to check for covid duty staffs:"))
if(q==id1):
    h1.display()
if(q==id2):
    h2.display()
```

OUTPUT


```
IDLE Shell 3.9.1                                                                    –  □  X
File  Edit  Shell  Debug  Options  Window  Help
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec  7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========================== RESTART: E:\COVID_PGM.py ==========================
Enter the hospital ID:6
enter the Doctor name:abhi
Enter the salary:60000
Enter the Specialization:nuero
Enter the department:nuero
ARE YOU ENGAGED IN COVID DUTY(YES/NO):Yes
enter the id989
Enter the name:aravind
enter the salary6000
enter the qualificatonbsc
Enter the department:bsc
ARE YOU ENGAGED IN COVID DUTY(YES/NO)Yes
Enter the hospital ID:7
enter the Doctor name:aravindh
Enter the salary:87700
Enter the Specialization:caerdio
Enter the department:cardio
ARE YOU ENGAGED IN COVID DUTY(YES/NO):Yes
enter the id87878
Enter the name:akhil
enter the salary8787
enter the qualificatonbsc
Enter the department:bsc
ARE YOU ENGAGED IN COVID DUTY(YES/NO)Yes
Enter the Hospital Id to check for Covid duty for staff:6
Doctor Name: abhi
Nurse Name: aravind
>>>
```