

S1 EXTERNAL LAB EXAMINATION

PROGRAMMING LAB

Submitted By

Nandana Anil

S2 MCA

Roll No-TKM20MCA2024

Question

1. Create a class 'Nurses' with data members id,name,salary,qualification,covid duty(yes,no) dept and constructors to initialize the data members. Create another class 'doctors' with its own data members-name,specialization,salary,covid duty(yes,no) dept and constructors to 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 all the data members. Create an instance of hospital showing the list of doctors and nurses engaged in covid duty.

PROGRAM CODE

```
class Doctors:
    Name = ""
    Salary = 0
    Specialisation = ""
    CovidDuty= ""
    Dept = ""

    def __init__(self,Name,Salary,Specialisation,CovidDuty,Dept):

        self.Name = Name
        self.Salary = Salary
        self.Specialisation = Specialisation
        self.CovidDuty = CovidDuty
```

```
self.Dept = Dept
```

```
def displayDetails(self):
```

```
    print("Doctor Details : ")
    print("Name : "+self.Name)
    print("Salary : "+self.Salary)
    print("Qualification : "+self.Specialisation)
    print("Covid Duty : "+self.CovidDuty)
    print("Dept : "+self.Dept)
```

```
class Nurses:
```

```
    Name = ""
```

```
    Salary = 0
```

```
    Qualification = ""
```

```
    CovidDuty = ""
```

```
    Dept = ""
```

```
def __init__(self,Name,Salary,Qualification,CovidDuty,Dept):
```

```
    self.Name = Name
    self.Salary = Salary
    self.Qualification = Qualification
    self.CovidDuty = CovidDuty
    self.Dept = Dept
```

```
def displayDetails(self):
```

```
    print("Nurse Details : ")
    print("Name : "+self.Name)
    print("Salary : "+self.Salary)
    print("Qualification : "+self.Qualification)
    print("Covid Duty : "+self.CovidDuty)
    print("Dept : "+self.Dept)
```

```
class Hospital:
```

```
    hospital_id = ""
```

```
    nursesList = []
```

```

doctorsList = []
covidWorkList = []

def __init__(self,hospital):
    self.hospital_id = hospital;

def display(self):
    print("Hospital Id : "+self.hospital_id)

def oncovidDuty(self):

    for nurse in self.nursesList:
        if(nurse.CovidDuty=="yes"):
            self.covidWorkList.append(nurse.Name+" (nurse)")

    for doctor in self.doctorsList:
        if(doctor.CovidDuty=="yes"):
            self.covidWorkList.append(doctor.Name+" (doctor)")

    print("list of covid duty personnel : "+str(self.covidWorkList))

#dri

hospitalObj = Hospital("Benziger")
hospitalObj.nursesList.append(Nurses("Nandana",35000,"Dermatology",
"yes","General"))

hospitalObj.doctorsList.append(Doctors("Ganga",90000,"Pediatrics","no",
"General"))

hospitalObj.oncovidDuty()

```

OUTPUT

```
File Edit Shell Debug Options Window Help
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.192
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more informat
>>>
===== RESTART: C:\Users\LENOVO\Desktop\PYTHON PROGRAMS[S1]\EXAM\nur:
list of covid duty personnel : ['Nandana (nurse)']
>>> |
```