

Programming Lab Exam

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Roll. No :21

Question 1:

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:-

Step 1: Start

Step 2: Create a class named 'Nurses' with data members id, name, salary, qualification, Covid duty, department and a constructor to

Step 3: Create a class named 'Doctors' with data members name, specialisation, salary, covid duty, department and a constructor to initialise them.

Step 4: Create a class 'Hospital' derived from Nurses and Doctors
initialise the constructor to create them

Step 5: Display the name of nurses and doctors who are engaged in covid duty.

Step 6: displaying the hospitalwise list

Step 7: Display the hospital where the doctors and Nurses are in duty.

Programme :

class Nurses:

```
def __init__(self):
```

```
    print("-----Nurses-----")
```

```
    self.n_memid=int(input("Enter the ID:"))
```

```
    self.n_name=input("Enter the name:")
```

```
    self.n_salary=int(input("Enter the salary:"))
```

```
    self.n_qualif=input("Enter the Qualification:")
```

```
    self.n_dept=input("Enter the department:")
```

```
    self.n_covid=input("Are you in Covid Duty(Yes/No):")
```

```
def display(self):
```

```
    print("Member ID:", self.n_memid)
```

```
    print("Name:",self.n_name)
```

```
    print("Salary:",self.n_salary)
```

```
    print("Qualification:",self.n_qualif)
```

```
    print("Department:",self.n_dept)
```

```
    print("On Duty:",self.n_covid)
```

class Doctor:

```
def __init__(self):
```

```
    print("-----Doctor-----")
```

```
    self.d_name=input("Enter the name:")
```

```
    self.d_salary=int(input("Enter the salary:"))
```

```
    self.d_specif=input("Enter the Specialization:")
```

```
self.d_dept=input("Enter the department:")
self.d_covid=input("Are you in Covid Duty(Yes/No):")
```

```
def display(self):
    print("Name:",self.d_name)
    print("Salary:",self.d_salary)
    print("specialization:",self.d_specif)
    print("Department:",self.d_dept)
    print("On Duty:",self.d_covid)
```

```
class hospital(Nurses,Doctor):
```

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

```
    def display(self):
        if(self.d_covid=='Yes','yes'):
            print("Doctor Name:",self.d_name)
        if(self.n_covid=='Yes','yes'):
            print("Nurse Name:",self.n_name)
```

```
id1 =int(input("Enter the hospital ID:"))
s1=hospital(id1)
id2 =int(input("Enter the hospital ID:"))
s2=hospital(id2)
q=int(input("Enter the Hospital Id to check for Covid duty for staff:"))
```

```
if(q==id1):  
    s1.display()  
if(q==id2):  
    s2.display()
```

Output :

```
===== RESTART: C:/Users/Jomin/Desktop/Examprgrm.py =====
Enter the hospital ID:1
-----Nurses-----
Enter the ID:1
Enter the name:as
Enter the salary:123
Enter the Qualification:B.Sc
Enter the department:Surgical
Are you in Covid Duty(Yes/No):Yes
-----Doctor-----
Enter the name:Anju
Enter the salary:12300
Enter the Specialization:Cardiology
Enter the department:Center
Are you in Covid Duty(Yes/No):Yes
Enter the hospital ID:2
-----Nurses-----
Enter the ID:123
Enter the name:Anjana
Enter the salary:3450
Enter the Qualification:B.SC
Enter the department:asd
Are you in Covid Duty(Yes/No):Yes
-----Doctor-----
Enter the name:jas
Enter the salary:12345
Enter the Specialization:manw
Enter the department:center
Are you in Covid Duty(Yes/No):Yes
Enter the Hospital Id to check for Covid duty for staff:2
Doctor Name: jas
Nurse Name: Anjana
>>> |
```