

S1 EXTERNAL LAB EXAMINATION PROGRAMMING LAB

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MCA S1 TKM20MCA2005

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 their 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 'Nurses' and initialize the values in a constructor. And create a function to display the data of nurses

Step 3: Create an another ~~to~~ class of name 'Doctor'. Initialize or input the value to the constructor. And create a function to display the data of Doctor

Step 4: Create a class ^{hospital} which inherit classes 'Nurses' and 'Doctor'. And call the constructors of both the classes Nurses and Doctor. store the value of the hospital id.

•

• Create a function to display the name of the staff if they are in covid duty.

Step 5: Input the hospital Id ~~at~~ and call the hospital class

Step 6: Input the hospital Id to check the staff for covid duty.

then

call the display() function to display

step 7: stop.

Program Code

```
class Nurses:
```

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

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

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

```
    Doctor.__init__(self)
    Nurses.__init__(self)
    self.h_id=id
```

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

```
    if(self.d_covid=='Yes'):
        print("Doctor Name:",self.d_name)
    if(self.n_covid=='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/X541U/Desktop/covid.py =====
Enter the hospital ID:23
-----Doctor-----
Enter the name:David
Enter the salary:1000
Enter the Specialization:surgen
Enter the department:cardio
Are you in Covid Duty(Yes/No):Yes
-----Nurses-----
Enter the Member ID:234
Enter the name:Amal
Enter the salary:12343
Enter the Qualification:Bac
Enter the department:cardio
Are you in Covid Duty(Yes/No):Yes
Enter the hospital ID:10
-----Doctor-----
Enter the name:Alex
Enter the salary:3435
Enter the Specialization:neruo
Enter the department:neruo
Are you in Covid Duty(Yes/No):Yes
-----Nurses-----
Enter the Member ID:343
Enter the name:Leya
Enter the salary:34343
Enter the Qualification:Bac
Enter the department:Nero
Are you in Covid Duty(Yes/No):No
Enter the Hospital Id to check for Covid duty for staff:23
Doctor Name: David
Nurse Name: Amal
>>>
```

Ln: 444 Cot: 4

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