

Test Title: Xplore_OPA_22May2020_Python

Question Title : OPA-Python: Hospital management

Solution:

Enter your code here. Read input from STDIN. Print output to STDOUT

#1. Define the Doctor class <after this line>

#2. Define the Hospital class <after this line>

#3. Define the main function / program.

#Refer the Question text, before sample input , which gives Some hint / more clarity for

main function implementation < after this line>

class Doctor:

```
def __init__(self,doctorId,doctorName,specialization,consultationFee):
    self.doctorId=doctorId
    self.doctorName=doctorName
    self.specialization=specialization
    self.consultationFee=consultationFee
```

class Hospital:

```
def __init__(self,doctorDict):
    self.doctorDB=doctorDict
```

```
def searchByDoctorName(self,name):
```

```
    restech=[]
    flag=0
```

```
    for docKeys in self.doctorDB.keys():
        if(name==self.doctorDB[docKeys].doctorName):
            restech.append(self.doctorDB[docKeys])
            flag=1
```

```
    if flag==0:
        return None
```

```
    return restech
```

```
def calculateConsultationFeeBySpecialization(self,specialization):
```

```
    flag=0
    totalConsultationFee=0
```

```
    for docKeys in self.doctorDB.keys():
```

```

        if(specialization==self.doctorDB[docKeys].specialization):
            totalConsultationFee=totalConsultationFee+self.doctorDB[docKeys].consultationFee
            flag=1
    if flag==0:
        totalConsultationFee=0
    return totalConsultationFee

```

```

if __name__ == '__main__':
    doctorDB={}
    doctorCount_master = int(input())
    for i in range(doctorCount_master):
        doctorId=int(input())
        doctorName=input()
        specialization=input()
        consultationFee=int(input())
        doctorObj=Doctor(doctorId,doctorName,specialization,consultationFee)
        doctorDB.update( {i: doctorObj} )
    hospitalObj=Hospital(doctorDB)

    doctorName_searchFor=input()
    resDoc=hospitalObj.searchByDoctorName(doctorName_searchFor)
    specialization_forTotalPrice=input()
    totalPrice=hospitalObj.calculateConsultationFeeBySpecialization(specialization_forTotalPrice)

    if resDoc==None:
        print("No Doctor Exists with the given DoctorName")
    else:
        for k in resDoc:
            print(k.doctorId)
            print(k.doctorName)
            print(k.specialization)
            print(k.consultationFee)
    if totalPrice==0 :
        print("No Doctor with the given specialization")
    else:
        print(totalPrice)

```