

Python Coding Questions:

1.) Medicine - getPriceByDisease

Create [class Medicine](#) with below attributes:

MedicineName - String

batch - String

disease - String

price - int

Create [class Solution](#) and implement [static method](#) "getPriceDisease" in the Solution class.

This method will take array of Medicine objects and a disease String as parameters.

And will return another array of integer objects

Where the disease String matches with the original array of Medicine object's disease attribute

Write necessary getter and setters.

Before calling "getPriceByDisease" method in the main method,
read values for four Medicine object referring the attributes in above sequence along with a
String disease.

Then call the "getPriceByDisease" method and print the result.

Input:

4

dolo650

FAC124W

fever

100

paracetamol

PAC545B

bodypain

150

almox

ALM747S

fever

200

aspirin

ASP849Q

flu

250

fever

Ouput:

100
200

Solution:

```
practice2.py > ...
1
2 class Medicine:
3     def __init__(self, MedicineName, batch, disease, price):
4         self.MedicineName = MedicineName
5         self.batch = batch
6         self.disease = disease
7         self.price = price
8
9
10 class Solution:
11     @classmethod
12     def getPriceByDisease(cls, Med_obj, find_disease):
13         result = []
14         for i in Med_obj:
15             if i.disease.lower() == find_disease.lower():
16                 result.append(i.price)
17         return result
18
19 Med_obj = []
20 n = int(input())
21 for i in range(n):
22     MedicineName = input()
23     batch = input()
24     disease = input()
25     price = int(input())
26
27     Med_obj.append(Medicine(MedicineName, batch, disease, price))
28
29 find_disease = input()
30 answer = Solution.getPriceByDisease(Med_obj, find_disease)
31 for i in answer:
32     print(i)
33
34
```

2.) Travel Agency

Create a `class Traveler` with below attributes

travelName - String

traveledCountry - (list of string type represents the names of the country the traveler has travelled.)

travelerAge - int

countryFrom - String

Create a constructor which takes all the above attributes in the same sequence.

Define another **class TravelAgency** with below attributes:

travelerList: (list of Traveler objects)

and having the below member functions:

countTravelersTraveledCountry: Which takes a string representing the name of a country as input, and returns the count of travelers from the travelerList of TravelAgency who has travelled that country.

getTravelerTravelledMaxCountry: finds the traveler who has travelled highest number of countries and returns the name of that traveler. if more than one such travelers are there having the highest count of countries travelled method returns the name of the traveler whose name appears first in the list as taken as input.

Instructions to write main functions:

- a. You would require to write the main section completely, hence please follow the below instruction for the same.
- b. You would require to write the main program which is inline to the "Sample input description section" mentioned below and to read the data in the same sequence.
- c. Create the respective objects(Traveler and TravelAgency) with the given sequence of arguments requirement, defined in the respective classes to fulfill the `_init_` method as mentioned in referring to the below instructions.
 - i. Create a list of travelers. To create the list,
 1. First read the number of travelers you want to store in the list.
 2. Read the values for the travelers, create the Traveler object and add to the list. This point repeats for the number of traveler to be added to the list. (consider the input taken in point 1 above).
 - a. First read the name of the traveler.
 - b. Then, read a number representing the count of countries travelled.

- c. Read a string representing the name of the country countries and add to the list. This point repeats for the count taken in point #2.b above.
- d. Finally, read values for travelerAge and countryFrom.

ii. Create a TravelAgency object by using the list created in point #c.i.

- d. Read the name of the country to be passed to the function **countTravelersTraveledCountry**.
- e. Call the function count Travelers Traveled Country by passing the value read in point #d as argument.
- f. Call the function **getTravelerTravelledMaxCountry**
- g. Print the value returned by the method count Travelers Traveled Country.
- h. Print the value returned by the method **getTravelerTravelledMaxCountry**.

You can use/refer the below given sample input and output for more details of the format for input and output.

Sample input descriptions:

- a. First line represents the integer value which represents the number of Traveler objects.
- b. Next lines of input represents one traveler specific data as below one by one in each line.

travelName

travelCountry (list of country names): for this first the count of countries travelled is read followed by names of the countries to create the list travelersAge the count of countries travelled is read followed by names of the countries to create the list

travelerAge

countryFrom

- c. The Point #b repeats for the numbers of objects mentioned in the points #a
- d. The last line of input is the name of the country to be passed as arguments to the method **countTravelersTraveledCountry**.

Input:

5

sachin

4

japan
brazil
china
nepal
40
india
kamini
4
denmark
Australia
indonesia
Ghana
37
nepal
saurav
6
Brazil
Bhutan
Afganistan
Uk
Nepal
Newzealand
32
Bangladesh
Ricky
3
Australia
Europe
Germany
42
UK
Dravid
2
india
Bhutan
39
Pakistan
Australia

Output:
2
saurav

Solution:

```
practice1.py > ...
1  class Traveler:
2      def __init__(self,travelerName,traveledCountry,travelerAge,countryFrom):
3          self.travelerName = travelerName
4          self.traveledCountry = traveledCountry
5          self.travelerAge = travelerAge
6          self.countryFrom = countryFrom
7
8
9  class TravelAgency:
10     @classmethod
11     def countTravelersTraveledCountry(cls, list_obj, find_country):
12         counter = 0
13         for i in list_obj:
14             if find_country in i.traveledCountry:
15                 counter += 1
16         return counter
17
18     @classmethod
19     def getTravelerTravelledMaxCountry(cls,list_obj):
20         max_con = 0
21         max_name = ""
22         for i in list_obj:
23             list1 = i.traveledCountry
24             if max_con < len(list1):
25                 max_con = len(list1)
26                 max_name = i.travelerName
27         return max_name
28
```

```

28
29 n = int(input())
30 list_obj = []
31
32 for i in range(n):
33     travelerName = input()
34     c = int(input())
35     traveledCountry = []
36     for j in range(c):
37         traveledCountry.append(input())
38     travelerAge = int(input())
39     countryFrom = input()
40
41     list_obj.append(Traveler(travelerName, traveledCountry, travelerAge, countryFrom))
42
43 find_country = input()
44
45
46 ans = TravelAgency.countTravelersTraveledCountry(list_obj, find_country)
47 ans1 = TravelAgency.getTravelerTravelledMaxCountry(list_obj)
48 print(ans)
49 print(ans1)
50
51

```

