Role Question V2

Roles - Question

Maui was requested by the gods to guard and manage the conquered islands.

One of his main roles is to decide for each island, what places each citizen can access.

To do this, for every conquered island he ask the local king top provide his a document describing his citizens, roles and places that they can visit.

Maui has a system that will help guards on the islands check what places citizens can access

Each island document is different though, so he wrote an interface for implementing the check for every new island, and now he wants your help to implement it for the island of apalula.

the interface is the following

```
interface VisitCheck {
fun loadDataset(datasetFile: String)
fun canVisit(citizen: String, place: String) -> Boolean
}
```

the current dataset for apalula island is as following:

```
1 {
2
       "citizens": [{
3
                "name": "Aco",
                "roles": ["Priest"],
                "allowed_places": ["Aco Home"]
5
6
           },
7
           {
                "name": "Aro",
8
                "roles": ["High Priest", "Guard"]
9
10
           },
11
12
                "name": "Baco",
                "roles": ["Farmer"],
13
14
                "allowed_places": ["City Wall"]
15
            }
16
       ],
        "roles": [{
17
                "title": "Priest",
18
19
                "allowed_places": ["Temple"]
20
           },
21
                "title": "Guard",
22
23
                "allowed_places": ["Armory", "City Wall"]
24
           },
25
                "title": "Carrier",
                "allowed_places": [],
27
28
                "sub_roles": ["Organizer"]
29
           },
30
            {
31
                "title": "High Priest",
```

```
32
               "allowed_places": ["Hidden Room", "City Wall"],
33
               "sub_roles": ["Priest"]
34
           },
35
           {
               "title": "Farmer",
36
               "allowed_places": ["Farm"],
37
               "sub_roles": ["Carrier"]
38
39
           },
40
               "title": "Organizer",
41
42
               "allowed_places": ["Storage"],
43
               "sub_roles": ["Farmer"]
44
           }
45
       ]
46 }
47
```

Please implement a permissionResolver for the apalula island

example responses for the following questions

```
1 canVisit("Aco", "Armory") -> False
2 canVisit("Aro", "City Wall") -> True
3 canVisit("Baco", "Storage") -> True
```

Notes

- You have 1h15min.
- You can use one of the following languages: Java / Kotlin / Go / Python / JS / TS
- If you have any questions, or something unclear, you can always ask $\ensuremath{\mathfrak{C}}$
- Make sure the code is runnable by the end of time.
- Good Luck