

**Spotify makes new songs recommendations to users every week based on the songs that are currently saved in their playlists.**

**Using the below dictionary which is a collection of playlists maintained by 'other' sample users, recommend songs to a new user.**

Use the below points as guidelines:

- Pass in a list the songs currently listed by a new user. This can have entries like SONGID01,SONGID02,...
- Find a playlist in the dictionary, where ALL of these songs are present (there can be more than 1 such playlist)
- From this playlist(s), pick the remaining songs and recommend to the new user (refer below examples for more details)

**This code generates the existing playlist for you.**

**Use this playlist to create your solution**

In [42]:

```
# Don't edit this cell, this create your playlist
import random,string
songids=['SONGID'+str(i).zfill(2) for i in range(1,21)]
userid=[''.join('USER')+str(random.randint(10,99)).zfill(2) for i in range(100)]
playlist={i:j for i,j in zip(userid,[random.sample(songids,random.randint(4,7)) for i in range(len(userid))])}
playlist
```

Out[42]:

```
{'USER90': ['SONGID03', 'SONGID16', 'SONGID10', 'SONGID01', 'SONGID06'],
 'USER86': ['SONGID01',
 'SONGID14',
 'SONGID20',
 'SONGID07',
 'SONGID06',
 'SONGID18'],
 'USER11': ['SONGID03',
 'SONGID05',
 'SONGID13',
 'SONGID12',
 'SONGID10',
 'SONGID19'],
 'USER58': ['SONGID11',
 'SONGID14',
 'SONGID15',
 'SONGID09',
 'SONGID19']}
```

Let's say the new user has listened to these 3 songs

In [43]:

```
myplist=['SONGID01','SONGID06','SONGID16']
```

What songs would you recommend him.

## Answer

Write your answer here

In [ ]:

In [ ]:

In [ ]:

In [ ]: