

# DnA: Homework 3

Aryan Gupta, Shashwat Dash, Himani Belsare [ASH] Team 48

- 1) Select \* from Track  
where Milliseconds IN (select MAX(Milliseconds) from Track);

```
mysql> select * from Track where Milliseconds IN (select MAX(Milliseconds) from Track);
```

TrackID	Name	AlbumID	Milliseconds	Bytes	GenreID	ArtistID
15	Under Pressure	6	559000	55900000	4	2

- 2) Select COUNT(DISTINCT T.TrackID) as NoOfAudioTracks  
from Track T, ListeningTo LT, Listener L  
Where T.TrackID = LT.TrackID and  
LT.ListenerID = L.ListenerID and  
Nationality = 'Indian';

```
mysql> select COUNT(DISTINCT T.TrackID) as NoOfAudioTracks  
-> from Track T, ListeningTo LT, Listener L  
-> where T.TrackID = LT.TrackID and  
-> LT.ListenerID = L.ListenerID  
-> and Nationality = 'Indian';
```

NoOfAudioTracks
12

- 3) Select Album.AlbumID, Album.Name, SUM(Bytes) as MemoryUsed  
From Track, Album  
where Track.AlbumID = Album.AlbumID  
group by Track.AlbumID  
having SUM(Bytes) >= ALL (select SUM(Bytes) from Track group by AlbumID);

```
mysql> select Album.AlbumID, Album.Name, SUM(Bytes) as MemoryUsed from Track, Album where Track.AlbumID = Album.AlbumID group by Track.AlbumID having SUM(Bytes) >= ALL (select SUM(Bytes) from Track group by AlbumID);
```

AlbumID	Name	MemoryUsed
6	Under Pressure	80300000

- 4) Select Listener.Nationality, SUM(ListeningTo.Milliseconds)  
 from Track, ListeningTo, Listener  
 where Track.TrackID = ListeningTo.TrackID and  
 ListeningTo.ListenerID = Listener.ListenerID  
 group by Listener.Nationality  
 having SUM(ListeningTo.Milliseconds) <= ALL (select SUM(Milliseconds from  
 ListeningTo, Listener where ListeningTo.ListenerID = Listener.ListenerID group by  
 Nationality);

```
mysql> select Listener.Nationality, SUM(ListeningTo.Milliseconds) from Track, ListeningTo, Listener where Track.TrackID = ListeningTo.TrackID AND ListeningTo.ListenerID = Listener.ListenerID group by Listener.Nationality having SUM(ListeningTo.Milliseconds) <= ALL (select SUM(Milliseconds) from ListeningTo, Listener where ListeningTo.ListenerID = Listener.ListenerID group by Nationality);
```

Nationality	SUM(ListeningTo.Milliseconds)
Indian	468984058

- 5) Select Genre.Name  
 From Track, Genre, ListeningTo, Listener  
 where Track.GenreID = Genre.GenreID and  
 Track.TrackID = ListeningTo.TrackID and  
 ListeningTo.ListenerID = Listener.ListenerID and  
 Nationality = 'American'  
 group by Genre.Name  
 having COUNT(DISTINCT Listener.Name)  
 >= ALL (select COUNT(DISTINCT Listener.Name)  
 From Track, Genre, ListeningTo, Listener  
 where Track.GenreID = Genre.GenreID and  
 Track.TrackID = ListeningTo.TrackID and  
 ListeningTo.ListenerID = Listener.ListenerID and  
 Nationality = 'American'  
 Order by Genre.Name);

```
mysql> select Genre.Name from Track, Genre, ListeningTo, Listener where Track.GenreID = Genre.GenreID AND Track.TrackID = ListeningTo.TrackID AND ListeningTo.ListenerID = Listener.ListenerID and nationality = 'American' group by Genre.Name having COUNT(DISTINCT Listener.Name) >= ALL(select COUNT(DISTINCT Listener.Name) from Track, Genre, ListeningTo, Listener where Track.GenreID = Genre.GenreID AND Track.TrackID = ListeningTo.TrackID AND ListeningTo.ListenerID = Listener.ListenerID and nationality = "American" order by Genre.Name);
```

Name
Rap

- 6) Select \* from Artist  
where ArtistID not in (select ArtistID from Track);

```
mysql> select * from Artist where ArtistID not in (select ArtistID from Track);
+-----+-----+
| ArtistID | Name          |
+-----+-----+
|         4 | Vennu Mallesh |
+-----+-----+
```

- 7) Select \* from Artist  
Where ArtistID not in  
(select ArtistID from Track where GenreID = (select GenreID from Genre  
where Name = "Pop"));

```
mysql> select * from Artist where ArtistID not in (select ArtistID from Track where GenreID = (select GenreID from Genre where Name = "Pop"));
+-----+-----+
| ArtistID | Name          |
+-----+-----+
|         2 | Logic         |
|         4 | Vennu Mallesh |
+-----+-----+
```