

## Team 7

### Data and Applications Homework 3

Query 1 –

- select Name From Track where Milliseconds = (select max(Milliseconds) from Track);

```
mysql> select Name
-> From Track
-> where Milliseconds = (
-> select max(Milliseconds) from Track
-> );
+-----+
| Name          |
+-----+
| Under Pressure |
+-----+
1 row in set (0.00 sec)
```

Query 2 –

- select count(distinct(lt.trackID)) as num from ListeningTo as lt, Listener as lr where lr.ListenerID = lt.ListenerID and lr.Nationality = 'Indian';

```
mysql> select count(distinct(lt.trackID)) as num from
+-----+
| num |
+-----+
| 12 |
+-----+
1 row in set (0.00 sec)
```

Query 3 –

- select Album.Name from Track, Album where Album.AlbumID = Track.AlbumID group by Track.AlbumID having sum(bytes) = ( select max(sum\_bytes) from (select sum(bytes) as sum\_bytes from Track group by AlbumID) as bytes\_table);

```
mysql> select Album.Name from Track, Album
-> where Album.AlbumID = Track.AlbumID
-> group by Track.AlbumID
-> having sum(bytes) = (
-> select max(sum_bytes) from
-> (select sum(bytes) as sum_bytes from Track group by AlbumID)
-> as bytes_table);
+-----+
| Name          |
+-----+
| Under Pressure |
+-----+
1 row in set (0.01 sec)
```

Query 4 –

- *select lr.Nationality from ListeningTo as lt, Listener as lr where lt.ListenerID = lr.listenerID group by Nationality order by sum(lt.Milliseconds) limit 1;*

```
mysql> select lr.Nationality from ListeningTo as lt, Listener as lr where
+-----+
| Nationality |
+-----+
| Indian      |
+-----+
1 row in set (0.00 sec)
```

Query 5 –

- *SELECT Name FROM Genre WHERE GenreID = (SELECT TT.GenreID FROM (SELECT (GenreID) FROM ListeningTo AS lt, Track AS tr, Listener AS ls WHERE lt.TrackID = tr.TrackID AND ls.ListenerID = lt.ListenerID AND ls.Nationality = 'American') AS TT GROUP BY TT.GenreID ORDER BY count(TT.GenreID) DESC LIMIT 1);*

```
mysql> SELECT Name
-> FROM Genre
-> WHERE GenreID = (
->     SELECT TT.GenreID
->     FROM (
->         SELECT (GenreID)
->         FROM ListeningTo AS lt,
->             Track AS tr,
->             Listener AS ls
->         WHERE lt.TrackID = tr.TrackID
->             AND ls.ListenerID = lt.ListenerID
->             AND ls.Nationality = 'American'
->     ) AS TT
->     GROUP BY TT.GenreID
->     ORDER BY count(TT.GenreID) DESC
->     LIMIT 1
-> );
+-----+
| Name |
+-----+
| Rap  |
+-----+
```

Query 6 –

- SELECT Name FROM Artist WHERE ArtistID NOT IN ( SELECT DISTINCT(ArtistID) FROM Track);

```
mysql> SELECT Name
-> FROM Artist
-> WHERE ArtistID NOT IN (
->         SELECT DISTINCT(ArtistID)
->         FROM Track
->     );
+-----+
| Name          |
+-----+
| Vennu Mallesh |
+-----+
```

Query 7 –

- SELECT Name FROM Artist WHERE ArtistID NOT IN (SELECT DISTINCT(ArtistID) FROM Track WHERE GenreID = (SELECT GenreID FROM Genre WHERE Name = 'Pop'));

```
mysql> SELECT Name
-> FROM Artist
-> WHERE ArtistID NOT IN(
->         SELECT DISTINCT(ArtistID)
->         FROM Track
->         WHERE GenreID =(
->             SELECT GenreID
->             FROM Genre
->             WHERE Name = 'Pop'
->         )
->     );
+-----+
| Name          |
+-----+
| Logic          |
| Vennu Mallesh  |
+-----+
2 rows in set (0.00 sec)
```