

HOMEWORK - 3

TEAM NUMBER: 12

TEAM MEMBERS:

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Question 1 : Which track has the longest length ?

SELECT NAME FROM Track ORDER BY Milliseconds DESC LIMIT 1;

```
mysql> SELECT NAME FROM Track ORDER BY Milliseconds DESC LIMIT 1;
+-----+
| NAME          |
+-----+
| Under Pressure |
+-----+
1 row in set (0.00 sec)
```

Question 2 : How many audio tracks were listened to by the people of “Indian” nationality ?

SELECT COUNT(DISTINCT TrackID) FROM ListeningTo LT JOIN Listener L ON LT.ListenerID = L.ListenerID WHERE Nationality = 'Indian';

```
mysql> SELECT COUNT(DISTINCT TrackID) FROM ListeningTo LT JOIN Listener L ON LT.ListenerID = L.ListenerID WHERE Nationality = 'Indian';
+-----+
| COUNT(DISTINCT TrackID) |
+-----+
| 12 |
+-----+
1 row in set (0.00 sec)
```

Question 3: Which album takes up the maximum space ?

**SELECT A.Name FROM Album A JOIN Track T ON
A.AlbumID=T.AlbumID GROUP BY A.Name ORDER BY SUM(Bytes)
DESC LIMIT 1;**

```
mysql> SELECT A.Name FROM Album A JOIN Track T ON A.AlbumID=T.AlbumID GROUP BY A.Name ORDER BY SUM(Bytes) DESC LIMIT 1;
+-----+
| Name          |
+-----+
| Under Pressure |
+-----+
1 row in set (0.01 sec)
```

Question 4: Which nationality listens to music the least ?

**SELECT L.Nationality FROM Listener L JOIN ListeningTo LT ON
L.ListenerID=LT.ListenerID GROUP BY Nationality ORDER BY
SUM(Milliseconds) LIMIT 1;**

```
mysql> SELECT L.Nationality FROM Listener L JOIN ListeningTo LT ON L.ListenerID=LT.ListenerID GROUP BY Nationality ORDER BY SUM(Milliseconds) LIMIT 1;
+-----+
| Nationality |
+-----+
| Indian      |
+-----+
1 row in set (0.00 sec)
```

**Question 5: Which genre is listened to by the most people among
“Americans” ?**

SELECT G.Name FROM Listener L

JOIN ListeningTo LT ON L.ListenerID=LT.ListenerID

JOIN Track T ON LT.TrackID=T.TrackID

JOIN Genre G ON T.GenreID=G.GenreID

WHERE L.Nationality='American' GROUP BY G.Name ORDER BY COUNT(DISTINCT L.Name) DESC LIMIT 1;

```
mysql> SELECT G.Name FROM Listener L
-> JOIN ListeningTo LT ON L.ListenerID=LT.ListenerID
-> JOIN Track T ON LT.TrackID=T.TrackID
-> JOIN Genre G ON T.GenreID=G.GenreID
-> WHERE L.Nationality='American' GROUP BY G.Name ORDER BY COUNT(DISTINCT L.Name) DESC LIMIT 1;
+-----+
| Name |
+-----+
| Rap |
+-----+
1 row in set (0.01 sec)
```

Question 6: Which artist did not make any albums at all ?

(Since AlbumID can't be NULL, an artist without an album can't have any tracks)

SELECT A.Name FROM Artist A LEFT JOIN Track T ON A.ArtistID=T.ArtistID WHERE T.AlbumID IS NULL;

```
mysql> SELECT A.Name FROM Artist A LEFT JOIN Track T ON A.ArtistID=T.ArtistID WHERE T.AlbumID IS NULL;
+-----+
| Name |
+-----+
| Vennu Mallesh |
+-----+
1 row in set (0.00 sec)
```

Question 7: Which artists did not record any tracks of the “Pop” genre type ?

SELECT A.Name FROM Artist A WHERE A.ArtistID NOT IN (SELECT T.ArtistID FROM Track T JOIN Genre G ON T.GenreID=G.GenreID WHERE G.Name='Pop');

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

