Data And Applications

Homework - 3

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Query 1:

Which Track Has Longest Length?

```
SELECT * FROM Track ORDER BY Milliseconds DESC LIMIT 1;
```

(or)

```
SELECT * FROM Track WHERE Milliseconds = ( SELECT MAX(Milliseconds)
FROM Track);
```

Query 2:

• How many audio tracks were listened to by the people of "Indian" nationality?

```
SELECT COUNT(DISTINCT TrackID) AS Count FROM Listener AS A, ListeningTo AS B WHERE Nationality='Indian' AND A.ListenerID=B.ListenerID;
```

Query 3:

Which album takes up the maximum space?

```
SELECT A.*, SUM(Bytes) AS Size FROM Album AS A, Track AS T WHERE A.AlbumID=T.AlbumID GROUP BY A.AlbumID ORDER BY Size DESC LIMIT 1;
```

Query 4:

· Which nationality listens to music the least?

```
SELECT L.Nationality FROM Listener AS L, ListeningTo AS LT WHERE L.ListenerID=LT.ListenerID GROUP BY L.Nationality ORDER BY SUM(LT.Milliseconds) ASC LIMIT 1;
```

Query 5:

• Which genre is listened to by the most people among "Americans"?

```
SELECT G.* FROM Genre AS G, Track AS T, ListeningTo AS LT, Listener AS L WHERE L.Nationality='American' AND L.ListenerID=LT.ListenerID AND LT.TrackID=T.TrackID AND T.GenreID=G.GenreID GROUP BY G.GenreID ORDER BY COUNT(*) DESC LIMIT 1;
```

Query 6:

• Which artist did not make any albums at all?

```
SELECT A.Name FROM Artist AS A LEFT JOIN Track AS T ON A.ArtistID=T.ArtistID GROUP BY A.Name HAVING COUNT(T.ArtistID) = 0;
```

Query 7:

• Which artists did not record any tracks of the "Pop" Genre type?

```
SELECT A.Name FROM Artist AS A LEFT JOIN Track AS T ON A.ArtistID=T.ArtistID GROUP BY A.Name HAVING COUNT(T.ArtistID) = 0;
```