

Richard Robinson

675- Extra Credit HW 1

SQL

1) Media type with 100 or more tracks

-print name

-expected 3

```
Select DISTINCT MT.Name
From MediaType MT, Track T
Where MT.MediaTypeId = T.MediaTypeId
Group By T. MediaTypeId
Having COUNT ( T.MediaTypeId ) > 99
```

2) Find playlists that have never been purchased in CA

-print id and name

-expected 18

```
SELECT DISTINCT PL.PlaylistId, PL.Name
FROM Playlist PL
WHERE PL.PlaylistId IN
(
    SELECT PT.PlaylistId
    FROM PlaylistTrack PT
    WHERE PT.TrackId IN
    (
        SELECT T.TrackId
        FROM Track T
        WHERE T.TrackId IN
        (
            SELECT IL.TrackId
            FROM InvoiceLine IL
            WHERE IL.InvoiceId IN
            (
                SELECT I.InvoiceId
                FROM Invoice I
                WHERE I.CustomerId NOT IN
                (
                    SELECT DISTINCT C.CustomerId
                    FROM Customer C
                    WHERE C.State = "CA"
                )
            )
        )
    )
)
```

3) Find customers with invoice total greater than average invoice total

-first name, postal code, invoice total

-expected 179

```

SELECT C.FirstName, C.PostalCode, I.Total
FROM Customer C, Invoice I
Where C.CustomerId = I.CustomerID
AND I.Total > (SELECT AVG( I2.Total)
               FROM Invoice I2)

```

4) Find the employees that at least 2 other employees report to.

-print ID, first and last name

-expected 3

```

SELECT E.EmployeeId, E.FirstName, E.LastName
FROM Employee E
WHERE EXISTS
(
    SELECT E.EmployeeId
    FROM Employee E2, Employee E3
    WHERE E.EmployeeId = E2.ReportsTo
    AND E.EmployeeId = E3.ReportsTo
    AND E2.EmployeeID <> E3.EmployeeID
)

```

5) find artists that have tracks in 'Rock'

-Print id and name of artists

-expect 51

```

SELECT A.artistId, A.Name
FROM Artist A
Where A.artistId IN
(
    SELECT AL.AlbumId
    FROM Album AL
    WHERE AL.AlbumId IN
    (
        SELECT AL.AlbumId
        FROM Track T
        WHERE T.GenreId IN
        (
            SELECT G.GenreId
            FROM Genre G
            Where G.Name = "rock"
        )
    )
)

```

6) Find artists who have recorded more than 10 albums

-print id, name

-expected 3

7) Find customers who are served by support representatives based in same state as CA

-First and last name customer and support rep, state

-expected 1

```
SELECT C.FirstName, C.LastName, E.State
FROM Customer C, Employee E
WHERE C.SupportRepId = E.EmployeeId
AND C.State = E.State
```

8) Find the albums that have more than 5 tracks. Print id, title of album. Also print number of tracks in album

-expected 250

```
SELECT AL.AlbumId, AL.Title, COUNT ( T.AlbumID )
FROM Album AL, Track T
WHERE AL.AlbumId = T.AlbumId
GROUP BY T.AlbumId
HAVING COUNT( T.AlbumId ) > 5
```

9) Do no more than 5 tracks

-expected 1

```
SELECT AL.AlbumId, AL.Title, COUNT ( T.AlbumID )
FROM Album AL, Track T
WHERE AL.AlbumId = T.AlbumId
GROUP BY T.AlbumId
HAVING COUNT( * ) = 5
```

10) Find artists that have tracks in 2 or more genres

-print id

-name

-expected 7

//My answer is wrong here.

```
SELECT DISTINCT A.artistId, A.Name
FROM Artist A
Where A.artistId IN
(
    SELECT AL.AlbumId
    FROM Album AL
    WHERE AL.AlbumId IN
    (
        SELECT AL.AlbumId
        FROM Track T
        GROUP BY GenreId
        HAVING COUNT ( * ) > 1
    )
)
```

)
)