**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**

SELECT A.ArtistId, A.Name

FROM Artist A, Album AL

WHERE A.ArtistId = AL.ArtistId

GROUP BY AL.ArtistId

HAVING COUNT( \* ) > 10

**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 trakcs 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 DISTINCT T.AlbumId

FROM Track T

GROUP BY GenreId

HAVING COUNT ( T.GenreID ) > 1

)

)