Jonas Vinter-Jensen
CSC 675 [01] / Fall-17
San Francisco State University

Extra Credit 1 – SQL Queries

1.

Find the media type which has 100 or more tracks. Print the name of such media type. Number

of rows returned in the result = 3.

SELECT MT.Name

FROM MediaType MT

WHERE MT.MediaTypeId IN

(

SELECT T.MediaTypeId

FROM Track T

GROUP BY T.MediaTypeId

HAVING COUNT(T.MediaTypeId)>100

)

;

Jonas Vinter-Jensen
CSC 675 [01] / Fall-17
San Francisco State University

2.

Find the playlists which have one or more tracks that have never been purchased in California

(CA). Print the Id, and the name of such playlists. Number of rows returned in the result = 18

SELECT DISTINCT PT.PlaylistId, P.Name

FROM PlaylistTrack PT, Playlist P

WHERE PT.PlaylistId=P.PlaylistId AND EXISTS

(

SELECT DISTINCT TrackId FROM Track T

EXCEPT

SELECT DISTINCT IL.TrackId

FROM Invoice I, InvoiceLine IL

WHERE I.InvoiceId=IL.InvoiceId AND I.BillingState='CA'

)

;

Jonas Vinter-Jensen
CSC 675 [01] / Fall-17
San Francisco State University

3.

Find the customers who have invoice total greater than the average invoice total. Print the first

and last name, postal code, and invoice total of such customers. Number of rows returned in the

result = 179

SELECT C.FirstName, C.LastName, C.PostalCode, I.Total

FROM Customer C, Invoice I

WHERE C.CustomerId=I.CustomerId AND I.Total>(SELECT AVG(I.Total) AS AvgInvoice

FROM Invoice I)

;

4.

Find the employees to whom at least two other employee reports to. Print the Id, and first and

last name of such employees. Number of rows returned in the result = 3

SELECT E.EmployeeId, E.FirstName, E.LastName

FROM Employee E

GROUP BY E.ReportsTo

HAVING COUNT(E.ReportsTo)>=2

;

5.

Find the artists that have tracks in the 'Rock' genre. Print the Id, and name of such artists.

Number of rows returned in the result = 51

```
SELECT DISTINCT A.ArtistId, A.Name

FROM Album AL, Artist A

WHERE A.ArtistId=AL.ArtistId AND AL.AlbumId IN

(

SELECT T.AlbumId

FROM Genre G, Track T

WHERE G.Name='Rock' AND G.GenreId=T.GenreId

)

;
```

6.

Find the artists who have recorded more than 10 albums. Print the Id, and name of such artists.

Also print the number of albums for such artists. Number of rows returned in the result = 3

SELECT A.ArtistId, A.Name

FROM Artist A

WHERE A.ArtistId IN

(

SELECT AL.ArtistId

FROM Album AL

GROUP BY ArtistId

HAVING COUNT(AL.ArtistId)>10

)

;

7.

Find the customers who are served by support representatives based in the same State as the

customer. Print the first and last name of the customer and the support representative, and the

State in which they are located. Number of rows returned in the result = 1

SELECT C.FirstName, C.LastName, C.State, E.FirstName, E.LastName, E.State

FROM Customer C, Employee E

WHERE E.EmployeeId=C.SupportRepId AND C.State=E.State

;

Jonas Vinter-Jensen
CSC 675 [01] / Fall-17
San Francisco State University

8.

Find the albums that have more than 5 tracks. Print the Id, and the title of such album. Also print

the number of tracks in each album. Number of rows returned in the result = 250

SELECT DISTINCT AL.AlbumId, AL.Title, COUNT(T.AlbumId) AS NumberOfTracks

FROM Track T, Album AL

WHERE AL.AlbumId=T.AlbumId

GROUP BY T.AlbumId

HAVING COUNT(T.AlbumId)>5

;

Jonas Vinter-Jensen
CSC 675 [01] / Fall-17
San Francisco State University

9.

Modify the above query to output the number of albums that have more than 5 tracks. Number of

rows returned in the result = 1

SELECT COUNT(*) AS NumberOfAlbums FROM

(

SELECT DISTINCT AL.AlbumId, AL.Title, COUNT(T.AlbumId) AS NumberOfTracks

FROM Track T, Album AL

WHERE AL.AlbumId=T.AlbumId

GROUP BY T.AlbumId

HAVING COUNT(T.AlbumId)>5

)

;

Jonas Vinter-Jensen
CSC 675 [01] / Fall-17
San Francisco State University

10.

Find the artists that have tracks in 2 or more genres. Print the Id, and name of such artists.

Number of rows returned in the result = 7

SELECT DISTINCT A.ArtistId, A.Name

FROM Artist A

WHERE A.ArtistId IN

(

SELECT DISTINCT AL.ArtistId

FROM Track T, Album AL

WHERE T.AlbumId=AL.AlbumId

GROUP BY T.GenreId

HAVING COUNT(T.GenreId) >= 2

)

;