**Homework**

1. How many different products are in each order? Which order has the most number of unique products?

1)

SELECT OrderID, Count(Distinct ProductID)

FROM [OrderDetails]

Group by OrderID

2)

SELECT OrderID, Count(Distinct ProductID)

FROM [OrderDetails]

Group by OrderID

Order by Count(ProductID) desc

3)

SELECT OrderID, Count(Distinct ProductID)

FROM [OrderDetails]

Group by OrderID

HAVING COUNT(DISTINCT ProdcutID) =

(SELECT MAX(Count\_Product)

FROM

(SELECT OrderID, Count(Distinct ProductID)

FROM [OrderDetails]

Group by OrderID

Order by Count(ProductID) desc))

1. Which products are sold in jars? What is the most expensive product that's sold in jars?

1)

SELECT \*

FROM [Products]

Where Unit like "%jars%"

2)

SELECT \*

FROM [Products]

Where Unit like "%jars%" and Price =

(SELECT MAX(Price)

FROM

(SELECT \*

FROM [Products]

Where Unit like "%jars%"

Order by price desc))

1. What are the product names are included in order ID 10250?

Step 1

SELECT \*

FROM [OrderDetails]

Where OrderID = 10250

Step 2

Solution One: sub-quary

SELECT \*

FROM [Products]

Where ProductID in

(SELECT \*

FROM [OrderDetails]

Where OrderID = 10250)

Solution Two: join

SELECT [Products]. ProductName, [OrderDetails]. OrderID

FROM [Products]

JOIN [OrderDetails]

On [Products]. ProductID = [OrderDetails]. ProductID

Where OrderID = 10250

1. What products are contained in category 'Dairy Products'?

Step 1

SELECT \*

FROM [Categories]

Where CategoryName = "Dairy Products"

Step 2

Solution One

SELECT ProductName, “Dairy Products” as CategoryName

FROM [Products]

Where CategoryID in

(SELECT CategoryID

FROM [Categories]

Where CategoryName = "Dairy Products")

Solution Two

SELECT ProductName, [Products]. CategoryID, CategoryName

FROM [Product]

Join [Categories]

On [Products]. CategoryID = [Categories]. Category ID

Where CategoryName = “Dairy Products”

1. Which actors have the first name 'Scarlett'?

SELECT \*

FROM sakila.actor

WHERE first\_name = "scarlett";

1. Which actors have the last name 'Johansson'

SELECT \*

FROM sakila.actor

WHERE last\_name = "Johansson";

1. How many distinct actors last names are there?

SELECT count(distinct last\_name)

FROM sakila.actor

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1. Which last names appear more than once?

SELECT last\_name, count(first\_name)

FROM sakila.actor;

group by last\_name

Having count(distinct first\_name)>1

Order by 2 desc

1. How many total rentals occured in May?

SELECT count(rental\_id)

FROM sakila.rental

WHERE rental\_date between "2005-05-01 00:00:00" and "2005-05-31 23:59:59"

1156

1. How many staff processed rentals in May?

SELECT count(distinct staff\_id)

FROM sakila.rental

WHERE rental\_date between "2005-05-01 00:00:00" and "2005-05-31 23:59:59"

2

1. Which staff processed the most rentals in May?

SELECT staff\_id, count(rental\_id)

FROM sakila.rental

WHERE rental\_date between "2005-05-01 00:00:00" and "2005-05-31 23:59:59"

group by staff\_id

558>598

Staff 1

Use sakila

Set @max\_rentals=

(Select max(rentals) as Max\_rentals,

From

(Select b. first\_name, b. last\_name, staff\_id, count(distinct rental\_id) as rentals

From rental as a

Join staff as b

On a. staff\_id = b. staff\_id

Where month(rental\_date) =5

Group by staff\_id

Order by 4 desc) temp)

Select @max\_rentals;

Select b. first\_name, b. last\_name, staff\_id, count(distinct rental\_id) as rentals

From rental as a

Join staff as b

On a. staff\_id = b. staff\_id

Where month(rental\_date) =5 count(distinct rental\_id)=max\_rentals

Group by staff\_id

Order by 4 desc

1. Which customer paid the most rental in August?

SELECT customer\_id, sum(amount), payment\_date

FROM sakila.payment

where month(payment\_date) = 8

group by customer\_id

order by sum(amount) desc

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1. A summary of rental total amount by month.

SELECT payment\_date, sum(amount)

FROM sakila.payment

Group by month(payment\_date) = 5, month(payment\_date) = 6, month(payment\_date) = 7, month(payment\_date) = 8

