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DS 3002

```
DROP database `northwind_dw`;

CREATE DATABASE `northwind_dw` /*!40100 DEFAULT CHARACTER SET latin1 */ /*!80016
DEFAULT ENCRYPTION=N */;


USE northwind_dw;


#Drop table dim_customers;

CREATE TABLE `dim_customers` (
 `customer_key` int NOT NULL auto_increment,
 `company` varchar(50) DEFAULT NULL,
 `last_name` varchar(50) DEFAULT NULL,
 `first_name` varchar(50) DEFAULT NULL,
 `job_title` varchar(50) DEFAULT NULL,
 `business_phone` varchar(25) DEFAULT NULL,
 `fax_number` varchar(25) DEFAULT NULL,
 `address` longtext,
 `city` varchar(50) DEFAULT NULL,
 `state_province` varchar(50) DEFAULT NULL,
 `zip_postal_code` varchar(15) DEFAULT NULL,
 `country_region` varchar(50) DEFAULT NULL,
 PRIMARY KEY (`customer_key`),
 KEY `city` (`city`),
 KEY `company` (`company`),
 KEY `first_name` (`first_name`),
 KEY `last_name` (`last_name`),
 KEY `zip_postal_code` (`zip_postal_code`),
 KEY `state_province` (`state_province`)
```

```sql
) ENGINE=InnoDB AUTO_INCREMENT=30 DEFAULT CHARSET=utf8;


#Drop table dim_employees;
CREATE TABLE `dim_employees` (
 `employee_key` int NOT NULL auto_increment,
 `company` varchar(50) DEFAULT NULL,
 `last_name` varchar(50) DEFAULT NULL,
 `first_name` varchar(50) DEFAULT NULL,
 `email_address` varchar(50) DEFAULT NULL,
 `job_title` varchar(50) DEFAULT NULL,
 `business_phone` varchar(25) DEFAULT NULL,
 `home_phone` varchar(25) DEFAULT NULL,
 `fax_number` varchar(25) DEFAULT NULL,
 `address` longtext,
 `city` varchar(50) DEFAULT NULL,
 `state_province` varchar(50) DEFAULT NULL,
 `zip_postal_code` varchar(15) DEFAULT NULL,
 `country_region` varchar(50) DEFAULT NULL,
 `web_page` longtext,
 PRIMARY KEY (`employee_key`),
 KEY `city` (`city`),
 KEY `company` (`company`),
 KEY `first_name` (`first_name`),
 KEY `last_name` (`last_name`),
 KEY `zip_postal_code` (`zip_postal_code`),
 KEY `state_province` (`state_province`)
) ENGINE=InnoDB AUTO_INCREMENT=10 DEFAULT CHARSET=utf8;


#Drop table dim_products;
CREATE TABLE `dim_products` (
 `products_key` int NOT NULL auto_increment,
```

```sql
  `product_code` varchar(25) DEFAULT NULL,

  `product_name` varchar(50) DEFAULT NULL,

  `description` longtext,

  `standard_cost` decimal(19,4) DEFAULT '0.0000',

  `list_price` decimal(19,4) NOT NULL DEFAULT '0.0000',

  `reorder_level` int(11) DEFAULT NULL,

  `target_level` int(11) DEFAULT NULL,

  `quantity_per_unit` varchar(50) DEFAULT NULL,

  `discontinued` tinyint(1) NOT NULL DEFAULT '0',

  `minimum_reorder_quantity` int(11) DEFAULT NULL,

  `category` varchar(50) DEFAULT NULL,

  `attachments` longblob,

  PRIMARY KEY (`products_key`),

  KEY `product_code` (`product_code`)

) ENGINE=InnoDB AUTO_INCREMENT=100 DEFAULT CHARSET=utf8;


#drop table dim_shippers;

CREATE TABLE `dim_shippers` (

  `shippers_key` int NOT NUll auto_increment,

  `company` varchar(50) DEFAULT NULL,

  `last_name` varchar(50) DEFAULT NULL,

  `first_name` varchar(50) DEFAULT NULL,

  `job_title` varchar(50) DEFAULT NULL,

  `business_phone` varchar(25) DEFAULT NULL,

  `fax_number` varchar(25) DEFAULT NULL,

  `address` longtext,

  `city` varchar(50) DEFAULT NULL,

  `state_province` varchar(50) DEFAULT NULL,

  `zip_postal_code` varchar(15) DEFAULT NULL,

  `country_region` varchar(50) DEFAULT NULL,

  PRIMARY KEY (`shippers_key`),
```

```
  KEY `city` (`city`),

  KEY `company` (`company`),

  KEY `first_name` (`first_name`),

  KEY `last_name` (`last_name`),

  KEY `zip_postal_code` (`zip_postal_code`),

  KEY `state_province` (`state_province`)

) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=utf8;



# PART 2



INSERT INTO `northwind_dw`.`dim_customers`

(`customer_key`,

`company`,

`last_name`,

`first_name`,

`job_title`,

`business_phone`,

`fax_number`,

`address`,

`city`,

`state_province`,

`zip_postal_code`,

`country_region`)

SELECT `customers`.`id`,

    `customers`.`company`,

    `customers`.`last_name`,

    `customers`.`first_name`,

    `customers`.`job_title`,

    `customers`.`business_phone`,

    `customers`.`fax_number`,

    `customers`.`address`,
```

```sql
    `customers`.`city`,
    `customers`.`state_province`,
    `customers`.`zip_postal_code`,
    `customers`.`country_region`
FROM `northwind`.`customers`;


SELECT * FROM northwind_dw.dim_customers;


INSERT INTO `northwind_dw`.`dim_employees`
(`employee_key`,
`company`,
`last_name`,
`first_name`,
`email_address`,
`job_title`,
`business_phone`,
`home_phone`,
`fax_number`,
`address`,
`city`,
`state_province`,
`zip_postal_code`,
`country_region`,
`web_page`)
SELECT `employees`.`id`,
    `employees`.`company`,
    `employees`.`last_name`,
    `employees`.`first_name`,
    `employees`.`email_address`,
    `employees`.`job_title`,
    `employees`.`business_phone`,
```

```sql
    `employees`.`home_phone`,

    `employees`.`fax_number`,

    `employees`.`address`,

    `employees`.`city`,

    `employees`.`state_province`,

    `employees`.`zip_postal_code`,

    `employees`.`country_region`,

    `employees`.`web_page`
FROM `northwind`.`employees`;



SELECT * FROM northwind_dw.dim_employees;



INSERT INTO `northwind_dw`.`dim_products`
(`products_key`,
`product_code`,
`product_name`,
`description`,
`standard_cost`,
`list_price`,
`reorder_level`,
`target_level`,
`quantity_per_unit`,
`discontinued`,
`minimum_reorder_quantity`,
`category`,
`attachments`)
SELECT `products`.`id`,
    `products`.`product_code`,
    `products`.`product_name`,
    `products`.`description`,
    `products`.`standard_cost`,
```

```sql
    `products`.`list_price`,
    `products`.`reorder_level`,
    `products`.`target_level`,
    `products`.`quantity_per_unit`,
    `products`.`discontinued`,
    `products`.`minimum_reorder_quantity`,
    `products`.`category`,
    `products`.`attachments`
FROM `northwind`.`products`;


SELECT * FROM northwind_dw.dim_products;


INSERT INTO `northwind_dw`.`dim_shippers`
(`shippers_key`,
`company`,
`last_name`,
`first_name`,
`job_title`,
`business_phone`,
`fax_number`,
`address`,
`city`,
`state_province`,
`zip_postal_code`,
`country_region`)
SELECT `shippers`.`id`,
    `shippers`.`company`,
    `shippers`.`last_name`,
    `shippers`.`first_name`,
    `shippers`.`job_title`,
    `shippers`.`business_phone`,
```

```sql
    `shippers`.`fax_number`,

    `shippers`.`address`,

    `shippers`.`city`,

    `shippers`.`state_province`,

    `shippers`.`zip_postal_code`,

    `shippers`.`country_region`
FROM `northwind`.`shippers`;



SELECT * FROM northwind_dw.dim_shippers;


# PART 3


#drop table fact_orders;
CREATE TABLE `fact_orders` (
`order_id` int,
`employee_id` int,
`customer_id` int,
`product_id` int,
`shipper_id` int,
`ship_name` varchar(50) DEFAULT NULL,
`ship_address` varchar(50) DEFAULT NULL,
`ship_city` varchar(50) DEFAULT NULL,
`ship_state_province` varchar(2) DEFAULT NULL,
`ship_zip_postal_code` varchar(50) DEFAULT NULL,
`ship_country_region` varchar(50) DEFAULT NULL,
`quantity` int,
`order_date` date,
`shipped_date` date,
`unit_price` int,
`discount` int,
```

```sql
`shipping_fee` int,

`taxes` int,

`payment_type` varchar(50) DEFAULT NULL,

`paid_date` date,

`tax_rate` int,

`order_status` varchar(50) DEFAULT NULL,

`order_details_status` varchar(50) DEFAULT NULL


) Engine = InnoDB DEFAULT charset = latin1;
```

PART 4

```sql
INSERT INTO northwind_dw.fact_orders

(order_id,

employee_id,

customer_id,

product_id,

shipper_id,

ship_name,

ship_address,

ship_city,

ship_state_province,

ship_zip_postal_code,

ship_country_region,

quantity,

order_date,

shipped_date,

unit_price,

discount,

shipping_fee,
```

```sql
       taxes,

       payment_type,

       paid_date,

       tax_rate,

       order_status,

       order_details_status)
SELECT o.id,

    o.employee_id,

    o.customer_id,

    od.product_id,

    o.shipper_id,

    o.ship_name,

    o.ship_address,

    o.ship_city,

    o.ship_state_province,

    o.ship_zip_postal_code,

    o.ship_country_region,

    od.quantity,

    o.order_date,

    o.shipped_date,

    od.unit_price,

    od.discount,

    o.shipping_fee,

    o.taxes,

    o.payment_type,

    o.paid_date,

    o.tax_rate,

    os.status_name AS order_status,

    ods.status_name AS order_details_status
FROM northwind.orders AS o

INNER JOIN northwind.orders_status AS os

ON o.status_id = os.id
```

```
        RIGHT OUTER JOIN northwind.order_details AS od

    ON o.id = od.order_id

    INNER JOIN northwind.order_details_status AS ods

    ON od.status_id = ods.id;



    -- ---------------------------------------------

    -- Validate that the Data was Inserted ----------

    -- ---------------------------------------------

    SELECT * FROM northwind_dw.fact_orders;



    # PART 5



    SELECT customers.`last_name` as `customer_name`,

        SUM(orders.`quantity`) as `total_quantity`,

        SUM(orders.`unit_price`) as `total_unit_price`

    FROM `northwind_dw`.`fact_orders` AS orders

    INNER JOIN `northwind_dw`.`dim_customers` AS customers

    ON orders.customer_id = customers.customer_key

    group by customers.`last_name`

    order by total_unit_price Desc;
```

customer_name	total_quantity	total_unit_price
▶ Lee	277	288
Pérez-Olaeta	427	163
Raghav	405	120
Andersen	260	119
Axen	253	101
Bedecs	115	85
Liu	175	74
Wacker	265	73
Mortensen	160	65
Edwards	35	64
Krschne	90	47
Xie	300	46
Rodman	50	32
Toh	130	18