

- **An SQL query that performs surrogate key pipeline and dummy row processing to populate the fact table**

```
TRUNCATE TABLE fact_orders;
```

```
INSERT INTO fact_orders
```

```
SELECT
```

```
IFNULL(o.DateSkey, -1) AS order_date_skey,
```

```
IFNULL(s.DateSkey, -1) AS ship_date_skey,
```

```
IFNULL(c.Customer_Skey, -1) AS Customer_Skey,
```

```
IFNULL(p.product_skey, -1) AS product_skey,
```

```
IFNULL(j.junk_skey, -1) AS junk_skey,
```

```
f.order_id,
```

```
f.unit_sales_amout,
```

```
f.sales_quantity,
```

```
f.discount_percent,
```

```
f.extended_sales_amount
```

```
FROM
```

```
(
```

```
SELECT
```

```
order_date,
```

```
ship_date,
```

```
customer_id,
```

```
product_id,
```

```
ship_mode,
```

```
order_priority,
```

```
order_id,
```

```
unit_sales_amout,
```

```
sales_quantity,
```

```
discount_percent,  
extended_sales_amount  
FROM sales_transaction S  
)  
f  
LEFT OUTER JOIN dim_date o ON f.order_date = o.TheDate  
LEFT OUTER JOIN dim_date s ON f.ship_date = s.TheDate  
LEFT OUTER JOIN dim_customer c ON f.customer_id = c.customer_id  
LEFT OUTER JOIN dim_junk j ON (f.ship_mode = j.ship_mode and f.order_priority = j.order_priority)  
LEFT OUTER JOIN dim_product p ON f.product_id = p.product_id;
```

- **Row count comparison between the sales transactions and the fact table**

```
select * from sales_transaction;
```

```
select * from fact_orders;
```

- **Total sales quantity/amount comparison between the sales transaction and the fact table**

```
SELECT sum(sales_quantity * unit_sales_amount)  
FROM fact_orders;
```

```
SELECT sum(sales_quantity* unit_sales_amount)  
FROM sales_transaction;
```