

Data Analysis Using SQL

1. Show all customer records

```
SELECT * FROM customers;
```

2. Show total number of customers

```
SELECT count(*) FROM customers;
```

3. Show transactions for Chennai market (market code for chennai is Mark001)

```
SELECT * FROM transactions where market_code='Mark001';
```

4. Show distinct product codes that were sold in chennai

```
SELECT distinct product_code FROM transactions where market_code='Mark001';
```

5. Show transactions where currency is US dollars

```
SELECT * from transactions where currency="USD"
```

6. Show transactions in 2020 join by date table

```
SELECT transactions.*, date.* FROM transactions INNER JOIN date ON  
transactions.order_date=date.date where date.year=2020;
```

7. Show total revenue in year 2020,

```
SELECT SUM(transactions.sales_amount) FROM transactions INNER JOIN date ON  
transactions.order_date=date.date where date.year=2020 and transactions.currency="INR\r" or  
transactions.currency="USD\r";
```

8. Show total revenue in year 2020, January Month,

```
SELECT SUM(transactions.sales_amount) FROM transactions INNER JOIN date ON  
transactions.order_date=date.date where date.year=2020 and and date.month_name="January" and  
(transactions.currency="INR\r" or transactions.currency="USD\r");
```

9. Show total revenue in year 2020 in Chennai

```
SELECT SUM(transactions.sales_amount) FROM transactions INNER JOIN date ON  
transactions.order_date=date.date where date.year=2020 and transactions.market_code="Mark001";
```

Data Analysis Using Power BI

1. Formula to create norm_amount column

```
= Table.AddColumn("#Filtered Rows", "norm_amount", each if [currency] = "USD" or [currency] ="USD#(cr)"  
then [sales_amount]*75 else [sales_amount], type any)
```