Customer Churn Analysis Using MySQL

Find total number of customers

```
SELECT
COUNT(DISTINCT CUSTOMER_ID) AS CUSTOMER_COUNT
FROM CHURN;
```

customer_count
4835

How much revenue did Maven lose to churned customers?

```
SELECT Customer_Status,
COUNT(Customer_ID) AS customer_count,
ROUND((SUM(Total_Revenue)*100 ) / SUM(SUM(Total_Revenue)) OVER(), 1) AS
Revenue_Percentage
FROM churn
GROUP BY Customer_Status having customer_status = 'Churned';
```

CUSTOMER_STATUS	CUSTOMER_COUNT	REVENUE_PERCENTAGE
Churned	1586	19.4

Typical tenure for churners

```
WITH TENURE_COUNTS AS (
SELECT
        CASE
         WHEN TENURE_IN_MONTHS <= 6 THEN '6 MONTHS'
         WHEN TENURE_IN_MONTHS <= 12 THEN '1 YEAR'
          WHEN TENURE_IN_MONTHS <= 24 THEN '2 YEARS'
         ELSE '> 2 YEARS'
      END AS TENURE,
      COUNT(CUSTOMER_ID) AS CHURN_COUNT
   FROM CHURN
   WHERE CUSTOMER_STATUS = 'CHURNED'
   GROUP BY
      CASE
         WHEN TENURE_IN_MONTHS <= 6 THEN '6 MONTHS'
         WHEN TENURE_IN_MONTHS <= 12 THEN '1 YEAR'
         WHEN TENURE_IN_MONTHS <= 24 THEN '2 YEARS'
         ELSE '> 2 YEARS'
      END
)
SELECT  TENURE,
   ROUND(CHURN_COUNT * 100 / SUM(CHURN_COUNT) OVER(), 1) AS CHURN_PERCENTAGE
FROM TENURE_COUNTS
ORDER BY CHURN_PERCENTAGE DESC;
```

TENURE	CHURN_PERCENTAGE
6 months	39.2
> 2 Years	30.5
2 Years	16.4
1 Year	13.9

Which cities have the highest churn rates?

```
SELECT
    city,
    COUNT(Customer_ID) AS Total_Customers,
    COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END) AS
Churned,
    ROUND(COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END)
* 100.0 / COUNT(Customer_ID), 2) AS Churn_Rate
FROM
    churn
GROUP BY
    city
HAVING
    COUNT(Customer_ID) > 30
    AND COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END) > 0
ORDER BY
    Churn_Rate DESC
LIMIT 4;
```

CITY	TOTAL_CUSTOMERS	CHURNED	CHURN_RATE
San Diego	233	161	69.10
Fallbrook	37	24	64.86
San Francisco	69	28	40.58
Escondido	39	15	38.46

Why did customers leave?

```
SELECT
  CHURN_CATEGORY,
  ROUND(SUM(TOTAL_REVENUE),0)AS CHURNED_REV,
  CEILING((COUNT(CUSTOMER_ID) * 100.0) / SUM(COUNT(CUSTOMER_ID)) OVER()) AS CHURN_PERCENTAGE
FROM
 CHURN
WHERE
    CUSTOMER_STATUS = 'CHURNED'
GROUP BY
  CHURN_CATEGORY
ORDER BY
  CHURN_PERCENTAGE DESC;
```

CHURN_CATEGORY	CHURNED_REV	CHURN_PERCENTAGE
Competitor	1641968	47
Dissatisfaction	589609	18
Attitude	545336	16
Other	341198	11
Price	404865	11

Why exactly did customers churn?

```
WITH churn_counts AS (
    SELECT
        Churn_Reason,
        Churn_Category,
        COUNT(Customer_ID) AS Churn_Count
    FROM churn
    WHERE Customer_Status = 'Churned'
    GROUP BY Churn_Reason, Churn_Category
)
SELECT
    Churn_Reason,
    Churn_Category,
    ROUND(Churn_Count * 100.0 / SUM(Churn_Count) OVER(), 1) AS
Churn_Percentage
FROM churn_counts
ORDER BY Churn_Percentage DESC
LIMIT 5;
```

CHURN_REASON	CHURN_CATEGORY	CHURN_PERCENTAGE
Competitor had better devices	Competitor	17.7
Competitor made better offer	Competitor	17.2
Attitude of support person	Attitude	10.7
Don't know	Other	7.4
Competitor offered more data	Competitor	6.6

What offers did churners have?

```
SELECT
    OFFER,
    ROUND(COUNT(CUSTOMER_ID) * 100.0 / SUM(COUNT(CUSTOMER_ID)) OVER(), 1) AS CHURNED
FROM
    CHURN
WHERE
    CUSTOMER_STATUS = 'CHURNED'
GROUP BY
OFFER
ORDER BY
CHURNED DESC;
```

OFFER	CHURNED
None	57.1
Offer E	20.8
Offer D	9.0
Offer B	5.5
Offer C	5.5
Offer A	2.1

What Internet Type did churners have?

```
SELECT
    Internet_Type,
    COUNT(Customer_ID) AS Churned,
    ROUND(COUNT(Customer_ID) * 100.0 /
SUM(COUNT(Customer_ID)) OVER(), 1) AS Churn_Percentage
FROM
    churn
WHERE
    Customer_Status = 'Churned'
GROUP BY
Internet_Type
ORDER BY
Churned DESC;
```

INTERNET_TYPE	CHURNED	CHURN_PERCENTAGE
Fiber Optic	1236	77.9
DSL	191	12.0
Cable	159	10.0

What Internet Type did 'Competitor' churners have?

```
SELECT
    INTERNET_TYPE,
    CHURN_CATEGORY,
    ROUND(COUNT(CUSTOMER_ID) * 100.0 / SUM(COUNT(CUSTOMER_ID)) OVER(), 1) AS
CHURN_PERCENTAGE
FROM
    CHURN
WHERE
    CUSTOMER_STATUS = 'CHURNED'
    AND CHURN_CATEGORY = 'COMPETITOR'
GROUP BY
INTERNET_TYPE,
CHURN_CATEGORY
ORDER BY CHURN_PERCENTAGE DESC;
```

INTERNET_TYPE	CHURN_CATEGORY	CHURN_PERCENTAGE
Fiber Optic	Competitor	78.9
Cable	Competitor	10.9
DSL	Competitor	10.2

Did churners have premium tech support?

```
SELECT
    Premium_Tech_Support,
    COUNT(Customer_ID) AS Churned,
    ROUND(COUNT(Customer_ID) *100.0 /
SUM(COUNT(Customer_ID)) OVER(),1) AS Churn_Percentage
FROM
    churn
WHERE
    Customer_Status = 'Churned'
GROUP BY Premium_Tech_Support
ORDER BY Churned DESC;
```

PREMIUM_TECH_SUPPORT	CHURNED	CHURN_PERCENTAGE
No	1304	82.2
Yes	282	17.8

What contract were churners on?

```
SELECT
    CONTRACT,
    COUNT(CUSTOMER_ID) AS CHURNED,
    ROUND(COUNT(CUSTOMER_ID) * 100.0 / SUM(COUNT(CUSTOMER_ID)) OVER(), 1) AS
CHURN_PERCENTAGE
FROM
    CHURN
WHERE
    CUSTOMER_STATUS = 'CHURNED'
GROUP BY
    CONTRACT
ORDER BY
    CHURNED DESC;
```

CONTRACT	CHURNED	CHURN_PERCENTAGE
Month-to-Month	1403	88.5
One Year	143	9.0
Two Year	40	2.5