QUERY DOCUMENT

KPI

```sql
--Use Customer_churn database for this query
Use  Customer_churn
Go

---Select data from table customer_data
Select * from customer_data
```

1   Finding Null Values

```sql
SELECT
SUM(CASE WHEN CUSTOMER_ID IS NULL THEN 1 ELSE 0 END) AS Customer_ID_Null_Count,
SUM(CASE WHEN Gender IS NULL THEN 1 ELSE 0 END) AS Gender_ID_Null_Count,
SUM(CASE WHEN Age IS NULL THEN 1 ELSE 0 END) AS Age_ID_Null_Count,
SUM(CASE WHEN Married IS NULL THEN 1 ELSE 0 END) AS Married_ID_Null_Count,
SUM(CASE WHEN State IS NULL THEN 1 ELSE 0 END) AS State_ID_Null_Count,
SUM(CASE WHEN Number_of_Referrals IS NULL THEN 1 ELSE 0 END) AS
    Number_of_Referrals_ID_Null_Count,
SUM(CASE WHEN Tenure_in_Months IS NULL THEN 1 ELSE 0 END) AS Tenure_in_Months_ID_Null_Count,
SUM(CASE WHEN Value_Deal IS NULL THEN 1 ELSE 0 END) AS Value_Deal_ID_Null_Count,
SUM(CASE WHEN Phone_Service IS NULL THEN 1 ELSE 0 END) As Phone_Service_ID_Null_Count,
SUM(CASE WHEN Multiple_Lines IS NULL THEN 1 ELSE 0 END) AS Multiple_Lines_ID_Null_Count,
SUM(CASE WHEN Internet_Service IS NULL THEN 1 ELSE 0 END) AS Internet_Service_ID_Null_Count,
SUM(CASE WHEN Internet_Type IS NULL THEN 1 ELSE 0 END) AS Internet_Type_ID_Null_Count,
SUM(CASE WHEN Online_Security IS NULL THEN 1 ELSE 0 END) AS Online_Security_ID_Null_Count,
SUM(CASE WHEN Online_Backup IS NULL THEN 1 ELSE 0 END) AS Online_Backup_ID_Null_Count,
SUM(CASE WHEN Device_Protection_Plan IS NULL THEN 1 ELSE 0 END) AS
    Device_Protection_Plan_ID_Null_Count,
SUM(CASE WHEN Premium_Support IS NULL THEN 1 ELSE 0 END) AS Premium_Support_ID_Null_Count,
SUM(CASE WHEN Streaming_TV IS NULL THEN 1 ELSE 0 END) AS Streaming_TV_ID_Null_Count,
SUM(CASE WHEN Streaming_Movies IS NULL THEN 1 ELSE 0 END) AS Streaming_Movies_ID_Null_Count,
SUM(CASE WHEN Streaming_Music IS NULL THEN 1 ELSE 0 END) AS Streaming_Music_ID_Null_Count,
SUM(CASE WHEN Unlimited_Data IS NULL THEN 1 ELSE 0 END) AS Unlimited_Data_ID_Null_Count,
SUM(CASE WHEN Contract IS NULL THEN 1 ELSE 0 END) AS Contract_ID_Null_Count,
SUM(CASE WHEN Paperless_Billing IS NULL THEN 1 ELSE 0 END) AS Paperless_Billing_ID_Null_Count,
SUM(CASE WHEN Payment_Method IS NULL THEN 1 ELSE 0 END) AS Payment_Method_ID_Null_Count,
SUM(CASE WHEN Monthly_Charge IS NULL THEN 1 ELSE 0 END) AS Monthly_Charge_ID_Null_Count,
SUM(CASE WHEN Total_Charges IS NULL THEN 1 ELSE 0 END) AS Total_Charges_ID_Null_Count,
SUM(CASE WHEN Total_Refunds IS NULL THEN 1 ELSE 0 END) AS Total_Refunds_ID_Null_Count,
SUM(CASE WHEN Total_Extra_Data_Charges IS NULL THEN 1 ELSE 0 END) AS
    Total_Extra_Data_Charges_ID_Null_Count,
SUM(CASE WHEN Total_Long_Distance_Charges IS NULL THEN 1 ELSE 0 END) AS
    Total_Long_Distance_Charges_ID_Null_Count,
SUM(CASE WHEN Total_Revenue IS NULL THEN 1 ELSE 0 END) AS Total_Revenue_ID_Null_Count,
SUM(CASE WHEN Customer_Status IS NULL THEN 1 ELSE 0 END) AS Customer_Status_ID_Null_Count,
SUM(CASE WHEN Churn_Category IS NULL THEN 1 ELSE 0 END) AS Churn_Category_ID_Null_Count,
SUM(CASE WHEN Churn_Reason IS NULL THEN 1 ELSE 0 END) AS Churn_Reason_ID_Null_Count
FROM customer_data;
```

Customer_ID_Null_Count	0
Gender_ID_Null_Count	0
Age_ID_Null_Count	0
Married_ID_Null_Count	0
State_ID_Null_Count	0
Number_of_Referrals_ID_Null_Count	0
Tenure_in_Months_ID_Null_Count	0
Value_Deal_ID_Null_Count	3548
Phone_Service_ID_Null_Count	0
Multiple_Lines_ID_Null_Count	622
Internet_Service_ID_Null_Count	0
Internet_Type_ID_Null_Count	1390
Online_Security_ID_Null_Count	1390
Online_Backup_ID_Null_Count	1390
Device_Protection_Plan_ID_Null_Count	1390
Premium_Support_ID_Null_Count	1390
Streaming_TV_ID_Null_Count	1390
Streaming_Movies_ID_Null_Count	1390
Streaming_Music_ID_Null_Count	1390
Unlimited_Data_ID_Null_Count	1390
Contract_ID_Null_Count	0
Paperless_Billing_ID_Null_Count	0
Payment_Method_ID_Null_Count	0
Monthly_Charge_ID_Null_Count	0
Total_Charges_ID_Null_Count	0
Total_Refunds_ID_Null_Count	0
Total_Extra_Data_Charges_ID_Null_Count	0
Total_Long_Distance_Charges_ID_Null_Count	0
Total_Revenue_ID_Null_Count	0
Customer_Status_ID_Null_Count	0
Churn_Category_ID_Null_Count	0
Churn_Reason_ID_Null_Count	0

2 Replace Null Values

```sql
SELECT
CUSTOMER_ID,
Gender,
Age,
Married,
State,
Number_of_Referrals,
Tenure_in_Months,
ISNULL(Value_Deal, 'None') as Value_Deal,
Phone_Service,
ISNULL(Multiple_Lines,'No') as Multiple_Lines,
Internet_Service,
ISNULL(Internet_Type, 'None') as Internet_Type,
ISNULL(Online_Security, 'None') as Online_Security,
ISNULL(Online_Backup, 'No') as Online_Backup,
ISNULL(Device_Protection_Plan, 'No') as Device_Protection_Plan,
ISNULL(Premium_Support, 'No') as Premium_Support,
ISNULL(Streaming_TV, 'No') as Streaming_TV,
```

```
ISNULL(Streaming_Movies, 'No') as Streaming_Movies,
ISNULL(Streaming_Music, 'No') as Streaming_Music,
ISNULL(Unlimited_Data, 'No') as Unlimited_Data,
Contract,
Paperless_Billing,
Payment_Method,
Monthly_Charge,
Total_Charges,
Total_Refunds,
Total_Extra_Data_Charges,
Total_Long_Distance_Charges,
Total_Revenue,
Customer_Status,
ISNULL(Churn_Category ,'Others') as Churn_Category,
ISNULL(Churn_Reason, 'No') as Churn_Reason
INTO [Customer_churn].[dbo].[new_Churn]
FROM [Customer_churn].[dbo].[customer_data];
```

3   Total Customer

```
-- Calculate Total Customer
SELECT Count(Customer_ID) AS Total_Customer
FROM customer_data
```

Total_Customer
6418

4   Total Churn

```
---Calculate Total Churn
SELECT COUNT(Customer_Status) as Total_Churn
FROM customer_data
Where Customer_Status = 'Churned';
```

Total_Churn
1732

5   Churn Rate

```
---Calculate Churn Rate
SELECT CAST(ROUND((COUNT(CASE WHEN Customer_Status ='Churned'THEN 1 END)*100.0/COUNT(*)), 2)AS
    FLOAT) AS Churn_Rate
From customer_data
```

3

Churn_Rate
26.99

6 New Joiner

```
---Calculate New Joiner
SELECT COUNT(CASE WHEN Customer_Status ='Joined' THEN 1 END ) AS New_Joiner
From customer_data
```

New_Joiner
411

7 Total Customer Count By Gender

```
---Calculate Total Customer split by Gender
SELECT Gender,
    COUNT(*) AS Gender_count,
    COUNT(Gender) * 100 / (SELECT COUNT(Gender) FROM customer_data) AS Percentage
FROM customer_data
GROUP BY Gender;
```

Gender	Gender_count	Percentage
Male	2370	36
Female	4048	63

8 Total Churn and Churn Rate By Gender

```
---Calculate Total Churned and Churn Rate by Gender
SELECT gender, COUNT(*) AS Churned_Count,
COUNT(Gender) * 100 / (SELECT COUNT(Gender) FROM customer_data Where Customer_Status ='Churned
    ') AS Percentage
FROM customer_data
WHERE Customer_Status = 'churned'
GROUP BY Gender;
```

gender	Churned_Count	Percentage
Male	621	35
Female	1111	64

9 Churn Rate By Contract

```sql
---Calculate Churn Rate by Contract
SELECT Contract,
Count(*) as Totalcount,
Count(Contract) * 100/ (Select Count(*) from customer_data) as Percentage,
CAST (ROUND(COUNT (CASE WHEN Customer_Status = 'Churned' then 1 end) *100.0 /COUNT(Customer_ID
    ),2)AS float) AS Churned_Rate
FROM customer_data
Group by Contract;
```

Contract	Totalcount	Percentage	Churned_Rate
Month-to-Month	3286	51	46.53
One Year	1413	22	11.04
Two Year	1719	26	2.73

10 Percentage of Churned, Joined and Stayed Customer

```sql
---Calculate Percentage of Churned, Joined and Stayed Customer
Select Customer_Status,
Count(Customer_Status) as Totalcount,
ROUND(Sum(Total_Revenue),2) as TotalRev,
ROUND(Sum(Total_Revenue) *100.0 /(Select Sum(Total_Revenue) from customer_data),2) as
    Percentage
From customer_data
Group by Customer_Status
```

Customer_Status	Totalcount	TotalRev	Percentage
Joined	411	49281.56	0.25
Churned	1732	3411960.58	17.52
Stayed	4275	16010148.26	82.22

11 Total Customer & Total Revenue By State

```sql
---Calculate Total Customer , Total Revenue of State
Select State,
Count(State) as TotalCustomer,
ROUND(Sum(Total_revenue),2) as TotalRevStatewise,
ROUND(Sum(Total_revenue)*100/ (Select sum(Total_revenue) from customer_data),2) as Percentage
From customer_data
Group by State
Order by Percentage desc
```

State	TotalCustomer	TotalRevStatewise	Percentage
Uttar Pradesh	629	1913136.87	9.83
Tamil Nadu	600	1843746.4	9.47
Maharashtra	504	1637789.36	8.41
Karnataka	470	1435622.18	7.37
Haryana	398	1200159.57	6.16
Andhra Pradesh	395	1191457.33	6.12
West Bengal	368	1182732.26	6.07
Gujarat	335	1024139.34	5.26
Punjab	342	1017664.26	5.23
Bihar	336	937603.07	4.82
Madhya Pradesh	288	890203.68	4.57
Jammu & Kashmir	320	858171.38	4.41
Telangana	281	840502.51	4.32
Rajasthan	259	805180.45	4.14
Kerala	200	564654.57	2.9
Odisha	152	487786.48	2.51
Delhi	127	419625.29	2.16
Assam	139	402679.85	2.07
Jharkhand	113	323451.73	1.66
Uttarakhand	62	187073.18	0.96
Chhattisgarh	59	173958.27	0.89
Puducherry	41	134052.37	0.69

12 Churn Rate By State

```sql
---Calculate Churn Rate by State
Select State,
Count(State) as TotalCustomer,
CAST (ROUND(COUNT (CASE WHEN Customer_Status = 'Churned' then 1 end) *100.0 /COUNT(Customer_ID
    ),2)AS float) AS Churned_Rate
From customer_data
Group by State
Order by Churned_Rate desc
```

State	TotalCustomer	Churned_Rate
Jammu & Kashmir	320	57.19
Assam	139	38.13
Jharkhand	113	34.51
Chhattisgarh	59	30.51
Delhi	127	29.92
Odisha	152	28.95
Kerala	200	27.5
Rajasthan	259	27.03
Puducherry	41	26.83
Haryana	398	26.13
West Bengal	368	26.09
Bihar	336	25.89
Andhra Pradesh	395	25.57
Tamil Nadu	600	25.5
Uttar Pradesh	629	24.96
Telangana	281	24.91
Maharashtra	504	22.82
Punjab	342	22.81
Karnataka	470	22.77
Uttarakhand	62	22.58
Madhya Pradesh	288	22.57
Gujarat	335	22.09

13 Churn Rate By Payment Method

```sql
--Calculate Churn Rate by Payment Method
SELECT
Payment_Method,
COUNT (CASE WHEN Customer_Status ='Churned' then 1 end) as Churned_Count,
CAST (ROUND(COUNT (CASE WHEN Customer_Status = 'Churned' then 1 end) *100.0 /COUNT(Customer_ID
    ),2)AS float) AS Churned_Rate
From customer_data
GROUP BY Payment_Method;
```

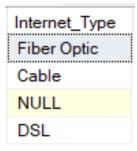| Payment_Method	Churned_Count	Churned_Rate
Bank Withdrawal	1231	34.43
Credit Card	369	14.8
Mailed Check	132	37.82

14 Churn Rate By Payment Method

```sql
--Calculate Total Churn by Churn Category
SELECT
Churn_Category,
COUNT(CASE WHEN Customer_Status ='Churned' then 1 end) as Churned_Count
From customer_data
GROUP BY Churn_Category
ORDER BY Churned_Count DESC
```

Churn_Category	Churned_Count
Competitor	761
Attitude	301
Dissatisfaction	300
Price	196
Other	174
NULL	0

15 Internet Type

```sql
Select Distinct Internet_Type
From customer_data
GO
```

Internet_Type
Fiber Optic
Cable
NULL
DSL

16 Churn Rate by Internet Type

```sql
--Calculate Churn Rate by Internet Type
SELECT
Internet_Type,
COUNT (CASE WHEN Customer_Status ='Churned' then 1 end) as Churned_Count,
CAST (ROUND(COUNT (CASE WHEN Customer_Status = 'Churned' then 1 end) *100.0 /COUNT(*),2)AS
    float) AS Churned_Rate
From customer_data
GROUP BY Internet_Type
ORDER BY Churned_Rate DESC
```

Internet_Type	Churned_Count	Churned_Rate
Fiber Optic	1136	41.1
Cable	196	25.72
DSL	291	19.37
NULL	109	7.84

17 Total Churn Customers and Churn Rate by Age Group

```sql
;WITH AgeGroup AS (
    SELECT
        Age,
        Customer_Status,
        CASE
            WHEN Age < 20 THEN '<20'
            WHEN Age BETWEEN 20 AND 34 THEN '20-35'
            WHEN Age BETWEEN 35 AND 49 THEN '35-50'
            WHEN Age BETWEEN 50 AND 64 THEN '50-65'
            ELSE '>65'
        END AS Age_Group
    FROM customer_data
)

SELECT
    CASE
        WHEN Age_Group = '<20' THEN 1
        WHEN Age_Group = '20-35' THEN 2
        WHEN Age_Group = '35-50' THEN 3
        WHEN Age_Group = '50-65' THEN 4
        WHEN Age_Group = '>65' THEN 5
    END AS Age_Group_Number,
    Age_Group,
    COUNT(*) AS Total_Customers,
    COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END) AS Churned_Count,
    CAST(ROUND(
        COUNT(CASE WHEN Customer_Status = 'Churned' THEN 1 END) * 100.0 / COUNT(*), 1) AS
            float)
    AS Churned_Rate
FROM AgeGroup
GROUP BY Age_Group
ORDER BY Age_Group_Number;
```

Age_Group_Number	Age_Group	Total_Customers	Churned_Count	Churned_Rate
1	<20	117	27	23.1
2	20-35	1648	388	23.5
3	35-50	1815	436	24
4	50-65	1705	430	25.2
5	>65	1133	451	39.8

18 Total Churn Customers and Churn Rate by Tenure Group

```sql
WITH TenureGroup AS(
SELECT Customer_Status,
Tenure_in_Months,
CASE
WHEN Tenure_in_Months <6  THEN '<6 Months'
WHEN Tenure_in_Months BETWEEN 6 AND 11 THEN '6 -12 Months'
WHEN Tenure_in_Months BETWEEN 12 AND 17 THEN '12 -18 Months'
WHEN Tenure_in_Months BETWEEN 18 AND 23 THEN '18 -24 Months'
WHEN Tenure_in_Months >23 THEN '>24 Months'
END AS Tenure_Group
FROM customer_data
)

SELECT
Tenure_Group,
CASE
WHEN Tenure_Group = '<6 Months' THEN 1
WHEN Tenure_Group = '6 -12 Months' THEN 2
WHEN Tenure_Group = '12 -18 Months' THEN 3
WHEN Tenure_Group = '18 -24 Months' THEN 4
WHEN Tenure_Group = '>24 Months' THEN 5
END Tenure_Group_Number,
COUNT(*) AS Total_Customers,
COUNT (CASE WHEN Customer_Status ='Churned' then 1 end) as Churned_Count,
CAST(ROUND(COUNT (CASE WHEN Customer_Status = 'Churned' then 1 end) *100.0 /COUNT(*),1) AS
    float) AS Churned_Rate
FROM TenureGroup
GROUP BY Tenure_Group
ORDER BY Tenure_Group_Number ASC;
```

Tenure_Group	Tenure_Group_Number	Total_Customers	Churned_Count	Churned_Rate
<6 Months	1	1058	279	26.4
6 -12 Months	2	1296	352	27.2
12 -18 Months	3	997	260	26.1
18 -24 Months	4	980	267	27.2
>24 Months	5	2087	574	27.5

19 Churn By Services

```sql
SELECT
    'Phone_Service' AS Services,
    COUNT(CASE WHEN Phone_Service = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Phone_Service = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Phone_Service = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Phone_Service = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID),
        2) AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Streaming_Music' AS Services,
    COUNT(CASE WHEN Streaming_Music = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Streaming_Music = 'no' THEN 1 END) AS no_Count,
    CAST(ROUND(COUNT(CASE WHEN Streaming_Music = 'yes' THEN 1 END) * 100.0 / COUNT(*), 2) AS
        FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Streaming_Music = 'no' THEN 1 END) * 100.0 / COUNT(*), 2) AS
        FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Unlimited_Data' AS Services,
    COUNT(CASE WHEN Unlimited_Data = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Unlimited_Data = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Unlimited_Data = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS float) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Unlimited_Data = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID),
        2)AS float) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Multiple_Lines' AS Services,
    COUNT(CASE WHEN Multiple_Lines = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Multiple_Lines = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Multiple_Lines = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Multiple_Lines = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID),
        2) AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'

UNION ALL

SELECT
    'Internet_Service' AS Services,
    COUNT(CASE WHEN Internet_Service = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Internet_Service = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Internet_Service = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Internet_Service = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID
        ), 2) AS  FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL
```

```sql
SELECT
    'Online_Security' AS Services,
    COUNT(CASE WHEN Online_Security = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Online_Security IN ('no', 'None') THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Online_Security = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Online_Security = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID)
        , 2)AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Online_Backup' AS Services,
    COUNT(CASE WHEN Online_Backup = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Online_Backup = 'No' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Online_Backup = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2)AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Online_Backup = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID),
        2)AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Device_Protection_Plan' AS Services,
    COUNT(CASE WHEN Device_Protection_Plan = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Device_Protection_Plan = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Device_Protection_Plan = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2)AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Device_Protection_Plan = 'No' THEN 1 END) * 100.0 / COUNT(
        CUSTOMER_ID), 2) AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Premium_Support' AS Services,
    COUNT(CASE WHEN Premium_Support = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Premium_Support = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Premium_Support = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2)AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Premium_Support = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID)
        , 2) AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Streaming_TV' AS Services,
    COUNT(CASE WHEN Streaming_TV = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Streaming_TV = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Streaming_TV = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID),2)AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Streaming_TV = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID),
        2) AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL
```

```sql
SELECT
    'Streaming_Music' AS Services,
    COUNT(CASE WHEN Streaming_Music = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Streaming_Music = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Streaming_Music = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Streaming_Music = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID)
        , 2) AS  FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Streaming_Movies' AS Services,
    COUNT(CASE WHEN Streaming_Movies = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Streaming_Movies = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Streaming_Movies = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Streaming_Movies = 'No' THEN 1 END) * 100.0 / COUNT(CUSTOMER_ID
        ), 2) AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned'
UNION ALL

SELECT
    'Paperless_Billing' AS Services,
    COUNT(CASE WHEN Paperless_Billing = 'yes' THEN 1 END) AS yes_Count,
    COUNT(CASE WHEN Paperless_Billing = 'no' THEN 1 END) AS no_Count,
        CAST(ROUND(COUNT(CASE WHEN Paperless_Billing = 'Yes' THEN 1 END) * 100.0 / COUNT(
            CUSTOMER_ID), 2) AS FLOAT) AS Yes_Percentage,
    CAST(ROUND(COUNT(CASE WHEN Paperless_Billing = 'No' THEN 1 END) * 100.0 / COUNT(
        CUSTOMER_ID), 2) AS FLOAT) AS No_Percentage
FROM new_Churn
WHERE Customer_Status = 'churned';
```

Services	yes_Count	no_Count	Yes_Percentage	No_Percentage
Phone_Service	1569	163	90.59	9.41
Streaming_Music	673	1059	38.86	61.14
Unlimited_Data	1387	345	80.08	19.92
Multiple_Lines	783	949	45.21	54.79
Internet_Service	1623	109	93.71	6.29
Online_Security	266	1466	15.36	78.35
Online_Backup	487	1245	28.12	71.88
Device_Protection_Plan	502	1230	28.98	71.02
Premium_Support	286	1446	16.51	83.49
Streaming_TV	749	983	43.24	56.76
Streaming_Music	673	1059	38.86	61.14
Streaming_Movies	762	970	44	56
Paperless_Billing	1292	440	74.6	25.4

20 Created View for PowerBI

```sql
CREATE VIEW new_churndata as
select * from new_Churn where Customer_Status In ('Churned', 'Stayed')
Go
CREATE VIEW new_Joineddata as
select * from new_Churn where Customer_Status = 'Joined'
```