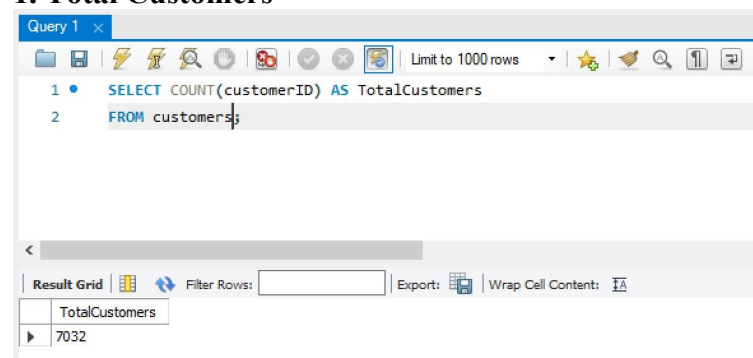


STATISTICS ANALYSIS

As part of my analysis, I employed a range of summary metrics to address the business problem. I calculated the total number of customers, churn rate, average monthly charges, top 5 tenure distribution, service usage, contract type, dependent customers, payment method, and top 5 additional service engagement. Furthermore, I examined the impact of paperless billing on customer behavior. By analyzing these metrics, I gained valuable insights into the customer base and identified key areas for improvement. My experience with data analysis allowed me to effectively utilize the available data and make informed recommendations to drive business growth and success.

1. Total Customers



Query 1

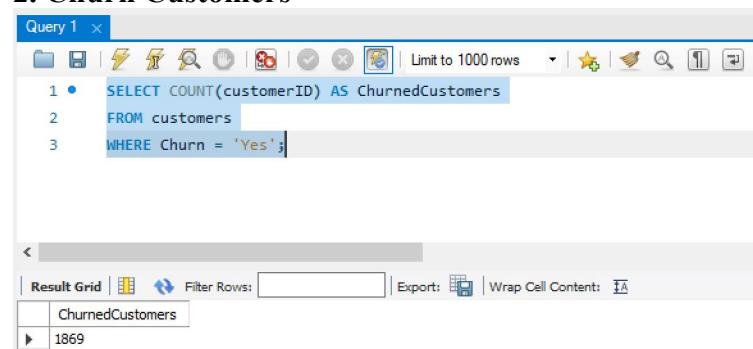
```
1 • SELECT COUNT(customerID) AS TotalCustomers
2 FROM customers;
```

Limit to 1000 rows

Result Grid

TotalCustomers
7032

2. Churn Customers



Query 1

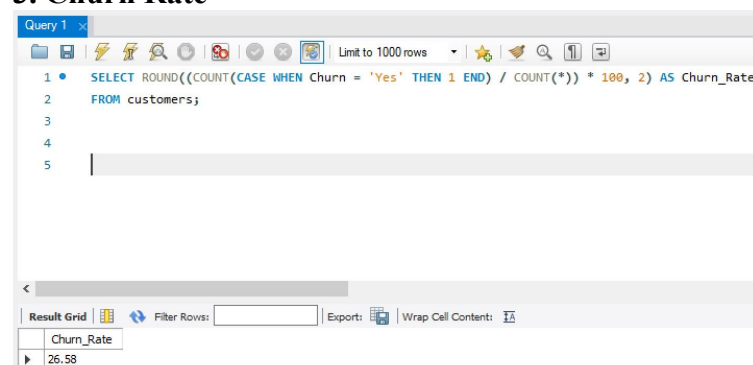
```
1 • SELECT COUNT(customerID) AS ChurnedCustomers
2 FROM customers
3 WHERE Churn = 'Yes';
```

Limit to 1000 rows

Result Grid

ChurnedCustomers
1869

3. Churn Rate



Query 1

```
1 • SELECT ROUND((COUNT(CASE WHEN Churn = 'Yes' THEN 1 END) / COUNT(*)) * 100, 2) AS Churn_Rate
2 FROM customers;
3
4
5
```

Limit to 1000 rows

Result Grid

Churn_Rate
26.58

4. Average Monthly Charges for Churn Customers

Query 1

```
1 • SELECT ROUND(AVG(MonthlyCharges),2) AS AverageMonthlyCharge
2 FROM customers
3 WHERE Churn = 'Yes';
4
```

Result Grid

AverageMonthlyCharge
74.44

5. Top 5 Tenure Distribution

Query 1

```
1 • SELECT tenure, COUNT(*) AS Customer_Count
2 FROM customers
3 WHERE Churn = 'Yes'
4 GROUP BY tenure
5 ORDER BY Customer_Count DESC
6 LIMIT 5;
7
```

Result Grid

tenure	Customer_Count
1	380
2	123
3	94
4	83
5	64

6. Service Usage

Query 1

```
1 • SELECT InternetService, COUNT(*) AS Customer_Count
2 FROM customers
3 WHERE Churn = 'Yes'
4 GROUP BY InternetService
5 ORDER BY Customer_Count DESC;
6
```

Result Grid

InternetService	Customer_Count
Fiber optic	1297
DSL	459
No	113

7. Contract Type

Query 1

```
1 • SELECT Contract, COUNT(*) AS Customer_Count
2 FROM customers
3 WHERE Churn = 'Yes'
4 GROUP BY Contract
5 ORDER BY Customer_Count DESC;
```

Result Grid

Contract	Customer_Count
Month-to-month	1655
One year	166
Two year	48

8. Dependent Customers

Query 1

```
1 • SELECT gender, SeniorCitizen, Partner, Dependents, COUNT(*) AS Customer_Count
2 FROM customers
3 WHERE Churn = 'Yes'
4 GROUP BY gender, SeniorCitizen, Partner, Dependents
5 ORDER BY Customer_Count DESC
6 LIMIT 5;
```

Result Grid

gender	SeniorCitizen	Partner	Dependents	Customer_Count
Female	0	No	No	429
Male	0	No	No	418
Female	1	No	No	158
Male	0	Yes	No	128
Female	0	Yes	Yes	124

9. Payment Method

Query 1

```
1 • SELECT PaymentMethod, COUNT(*) AS Customer_Count
2 FROM customers
3 WHERE Churn = 'Yes'
4 GROUP BY PaymentMethod
5 ORDER BY Customer_Count DESC;
```

Result Grid

PaymentMethod	Customer_Count
Electronic check	1071
Mailed check	308
Bank transfer (automatic)	258
Credit card (automatic)	232

10. Top 5 Additional Service Engagement

```
Query 1
SELECT TechSupport, DeviceProtection, StreamingTV, StreamingMovies, COUNT(*) AS Customer_Count
FROM customers
WHERE Churn = 'Yes'
GROUP BY TechSupport, DeviceProtection, StreamingTV, StreamingMovies
ORDER BY Customer_Count DESC
LIMIT 5;
```

Result Grid

	TechSupport	DeviceProtection	StreamingTV	StreamingMovies	Customer_Count
▶	No	No	No	513	
	No	No	Yes	221	
	No	Yes	Yes	204	
	No	No	Yes	165	
	No	No	Yes	149	

11. Paperless Billing

```
Query 1 x
1 • SELECT PaperlessBilling, COUNT(*) AS Customer_Count
2 FROM customers
3 WHERE Churn = 'Yes'
4 GROUP BY PaperlessBilling;
5

<
Result Grid Filter Rows: Export: Wrap Cell Content:
PaperlessBilling Customer_Count
Yes 1400
No 469
```