TELCO CUSTOMER CHURN

Data Dictionary
IBM Telco Customer Churn Dataset - California Q3

1. customers_demographics
Contains demographic information about each customer.

Column Name	Data Type	Description
customer_id	VARCHAR(20)	Unique customer identifier (Primary Key)
gender	VARCHAR(10)	Customer gender: Male or Female
age	INT	Customer age in years
senior_citizen	VARCHAR(3)	Whether customer is 65+ years old (Yes/No)
married	VARCHAR(3)	Marital status (Yes/No)
dependents	VARCHAR(3)	Whether customer has dependents (Yes/No)
number_of_dependents	INT	Number of dependents living with customer

2. customers_location
Contains geographic location data for each customer.

Column Name	Data Type	Description
customer_id	VARCHAR(20)	Customer identifier (Primary Key, Foreign Key → demographics)
country	VARCHAR(50)	Country of residence
state	VARCHAR(50)	State of residence
city	VARCHAR(100)	City of residence
zip_code	VARCHAR(10)	ZIP code (Foreign Key → zip_population)
latitude	FLOAT	Geographic latitude coordinate
longitude	FLOAT	Geographic longitude coordinate

3. zip_population
Contains population data for each ZIP code.

Column Name	Data Type	Description
zip_code	VARCHAR(10)	ZIP code (Primary Key)
population	INT	Total population in ZIP code area

4. zip_census_data
Contains economic data from US Census Bureau API (2020 ACS 5-year).

Column Name	Data Type	Description
zip_code	VARCHAR(10)	ZIP code (Primary Key, Foreign Key → zip_population)
median_income	DECIMAL(10,2)	Median household income in USD (US Census 2020)
population_below_poverty	INT	Number of people below poverty line
unemployed_population	INT	Number of unemployed individuals

5. customers_services
Contains service subscription and billing information.

Column Name	Data Type	Description
customer_id	VARCHAR(20)	Customer identifier (Primary Key, Foreign Key → demographics)
quarter	VARCHAR(5)	Fiscal quarter of data (Q1, Q2, Q3, Q4)
tenure_in_months	INT	Total months customer has been with company
phone_service	VARCHAR(3)	Whether customer has phone service (Yes/No)
internet_service	VARCHAR(3)	Whether customer has internet service (Yes/No)
internet_type	VARCHAR(20)	Type: DSL, Fiber Optic, Cable, or No Internet
contract	VARCHAR(20)	Contract type: Month-to-Month, One Year, Two Year
payment_method	VARCHAR(50)	Payment method: Bank Withdrawal, Credit Card, Mailed Check
monthly_charge	DECIMAL(10,2)	Current monthly charge in USD
total_charges	DECIMAL(10,2)	Total charges to date in USD

6. customers_status

Contains customer satisfaction and churn information.

Column Name	Data Type	Description
customer_id	VARCHAR(20)	Customer identifier (Primary Key, Foreign Key → demographics)
satisfaction_score	INT	Customer satisfaction (1=Very Unsatisfied to 5=Very Satisfied)
churn_label	VARCHAR(3)	Whether customer churned (Yes/No)
churn_value	INT	Churn indicator (1=Churned, 0=Stayed)
churn_score	INT	Predicted churn probability score (0-100)
cltv	INT	Customer Lifetime Value in USD
churn_category	VARCHAR(50)	High-level reason: Competitor, Attitude, Dissatisfaction, Price, Other
churn_reason	VARCHAR(200)	Specific reason customer left the company