

## Final SQL Queries Used:

```
UPDATE telco_customer_churn  
SET TotalCharges = TRIM(TotalCharges);
```

```
UPDATE telco_customer_churn  
SET TotalCharges = '0'  
WHERE TotalCharges = " OR TotalCharges IS NULL;
```

```
UPDATE telco_customer_churn  
SET TotalCharges = REPLACE(REPLACE(REPLACE(TotalCharges, '$', ''), ',', ''), ' ', '')  
WHERE TotalCharges REGEXP '^[^0-9.]';
```

```
ALTER TABLE telco_customer_churn  
MODIFY COLUMN TotalCharges DECIMAL(10, 2);
```

```
ALTER TABLE telco_customer_churn  
ADD COLUMN Tenure_Months_Binned VARCHAR(20);
```

```
UPDATE telco_customer_churn  
SET Tenure_Months_Binned =  
CASE  
    WHEN tenure >= 0 AND tenure <= 12 THEN '0-12 Months'  
    WHEN tenure > 12 AND tenure <= 24 THEN '13-24 Months'  
    WHEN tenure > 24 AND tenure <= 48 THEN '25-48 Months'  
    WHEN tenure > 48 AND tenure <= 72 THEN '49-72 Months'  
    WHEN tenure > 72 THEN '72+ Months'
```

```
ELSE 'Unknown'
```

```
END;
```

```
ALTER TABLE telco_customer_churn
```

```
ADD COLUMN Total_Service_Addons INT;
```

```
UPDATE telco_customer_churn
```

```
SET Total_Service_Addons =
```

```
(CASE WHEN OnlineSecurity = 'Yes' THEN 1 ELSE 0 END) +
```

```
(CASE WHEN OnlineBackup = 'Yes' THEN 1 ELSE 0 END) +
```

```
(CASE WHEN DeviceProtection = 'Yes' THEN 1 ELSE 0 END) +
```

```
(CASE WHEN TechSupport = 'Yes' THEN 1 ELSE 0 END) +
```

```
(CASE WHEN StreamingTV = 'Yes' THEN 1 ELSE 0 END) +
```

```
(CASE WHEN StreamingMovies = 'Yes' THEN 1 ELSE 0 END);
```

```
ALTER TABLE telco_customer_churn
```

```
ADD COLUMN Has_Paperless_Electronic_Payment INT;
```

```
UPDATE telco_customer_churn
```

```
SET Has_Paperless_Electronic_Payment =
```

```
CASE
```

```
    WHEN PaperlessBilling = 'Yes' AND PaymentMethod = 'Electronic check' THEN 1
```

```
    ELSE 0
```

```
END;
```

```
ADD COLUMN Average_Monthly_Charge_per_Tenure DECIMAL(15, 6);
```

```
UPDATE telco_customer_churn
```

```
SET Average_Monthly_Charge_per_Tenure =  
CASE  
    WHEN tenure > 0 THEN TotalCharges / tenure  
    ELSE MonthlyCharges  
END;
```

```
ALTER TABLE telco_customer_churn  
MODIFY COLUMN SeniorCitizen VARCHAR(3);
```

```
UPDATE telco_customer_churn  
SET SeniorCitizen =  
CASE  
    WHEN SeniorCitizen = '0' THEN 'No'  
    WHEN SeniorCitizen = '1' THEN 'Yes'  
    ELSE SeniorCitizen  
END;
```

```
ALTER TABLE telco_customer_churn  
MODIFY COLUMN Has_Paperless_Electronic_Payment VARCHAR(3);
```

```
UPDATE telco_customer_churn  
SET Has_Paperless_Electronic_Payment =  
CASE  
    WHEN Has_Paperless_Electronic_Payment = '0' THEN 'No'  
    WHEN Has_Paperless_Electronic_Payment = '1' THEN 'Yes'  
    ELSE Has_Paperless_Electronic_Payment  
END;
```

```
ALTER TABLE telco_customer_churn
```

```
CHANGE COLUMN Tenure_Months_Binned TenureMonthsBinned VARCHAR(20);
```

```
ALTER TABLE telco_customer_churn
```

```
CHANGE COLUMN Total_Service_Addons TotalServiceAddons INT;
```

```
ALTER TABLE telco_customer_churn
```

```
CHANGE COLUMN Has_Paperless_Electronic_Payment HasPaperlessElectronicPayment VARCHAR(3);
```

```
ALTER TABLE telco_customer_churn
```

```
CHANGE COLUMN Average_Monthly_Charge_per_Tenure AverageMonthlyChargePerTenure DECIMAL(15,  
6);
```