

## Data Cleaning Report

DataFrame Name	Column Name	Metrics	Before	After
customer	phone_number	Null Count	240	0
review	review_text	Null Count	190	0
product	description	Null Count	43	0
customer	zip_code	Data Type Change	double	string
review	review_date	Data Type Change	string	date
customer	customer_id	Data Type Change	double	bigint
orders	total_amount	Data Type Change	double	bigint
product	price	Negative Count	86	0
product	product_id	Data Type Change	double	bigint
product	inventory	Data Type Change	double	int
orders	customer_id	Data Type Change	double	bigint
orders	order_date	Data Type Change	timestamp	date
customer	birth_date	Data Type Change	timestamp	date
orders	order_id	Data Type Change	double	bigint

## DataFrame Row and Column Counts

DataFrame	Row Before	Row After	Column Bef	Column Af	Duplicate Bef	Duplicate Af
review	10000	10000	6	6	0	0
order_item	10000	10000	5	5	0	0
customer	5000	5000	9	9	0	0
orders	5000	5000	6	6	0	0
product	5000	5000	6	6	0	0