

Automated EDA Report

The file has 9994 rows and 21 columns.

Column names in the file are:

```
['Row ID', 'Order ID', 'Order Date', 'Ship Date', 'Ship Mode', 'Customer ID', 'Customer Name',  
'Segment', 'Country', 'City', 'State', 'Postal Code', 'Region', 'Product ID', 'Category',  
'Sub-Category', 'Product Name', 'Sales', 'Quantity', 'Discount', 'Profit']
```

Data types of each column:

Row ID	int64
Order ID	object
Order Date	object
Ship Date	object
Ship Mode	object
Customer ID	object
Customer Name	object
Segment	object
Country	object
City	object
State	object
Postal Code	int64
Region	object
Product ID	object
Category	object
Sub-Category	object
Product Name	object
Sales	float64
Quantity	int64
Discount	float64
Profit	float64
dtype:	object

Number of unique values in each column:

Row ID	9994
Order ID	5009
Order Date	1237
Ship Date	1334
Ship Mode	4
Customer ID	793
Customer Name	793
Segment	3
Country	1
City	531
State	49
Postal Code	631
Region	4
Product ID	1862
Category	3
Sub-Category	17
Product Name	1850
Sales	5825
Quantity	14
Discount	12
Profit	7287
dtype:	int64

Number of null values in each column:

Row ID	0
Order ID	0
Order Date	0

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```
Ship Date      0
Ship Mode      0
Customer ID    0
Customer Name  0
Segment        0
Country        0
City           0
State          0
Postal Code    0
Region         0
Product ID     0
Category       0
Sub-Category   0
Product Name   0
Sales          0
Quantity       0
Discount       0
Profit         0
dtype: int64
```

Percentage of missing values in each column:

```
Row ID      0.0
Order ID    0.0
Order Date  0.0
Ship Date   0.0
Ship Mode   0.0
Customer ID 0.0
Customer Name 0.0
Segment     0.0
Country     0.0
City        0.0
State       0.0
Postal Code 0.0
Region      0.0
Product ID  0.0
Category    0.0
Sub-Category 0.0
Product Name 0.0
Sales       0.0
Quantity    0.0
Discount    0.0
Profit      0.0
dtype: float64
```

Total duplicate rows in the dataset: 0

Summary statistics for numeric columns:

	Row ID	Postal Code	Sales	Quantity	Discount	Profit
count	9994.00	9994.00	9994.00	9994.00	9994.00	9994.00
mean	4997.50	55190.38	229.86	3.79	0.16	28.66
std	2885.16	32063.69	623.25	2.23	0.21	234.26
min	1.00	1040.00	0.44	1.00	0.00	-6599.98
25%	2499.25	23223.00	17.28	2.00	0.00	1.73
50%	4997.50	56430.50	54.49	3.00	0.20	8.67
75%	7495.75	90008.00	209.94	5.00	0.20	29.36
max	9994.00	99301.00	22638.48	14.00	0.80	8399.98

Correlation matrix (numeric columns only):

	Row ID	Postal Code	Sales	Quantity	Discount	Profit
Row ID	1.00	0.01	-0.00	-0.00	0.01	0.01
Postal Code	0.01	1.00	-0.02	0.01	0.06	-0.03

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Sales	-0.00	-0.02	1.00	0.20	-0.03	0.48
Quantity	-0.00	0.01	0.20	1.00	0.01	0.07
Discount	0.01	0.06	-0.03	0.01	1.00	-0.22
Profit	0.01	-0.03	0.48	0.07	-0.22	1.00

Number of outliers detected in each numeric column (IQR method):

{'Row ID': 9994, 'Postal Code': 9994, 'Sales': 8827, 'Quantity': 9824, 'Discount': 9072, 'Profit': 8717}
