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1. Data Filtering:

Extract all rows where sales are greater than 1000.

Find all sales records for a specific region (e.g., "East").

2. Data Processing:

Add a new column, Profit\_Per\_Unit, calculated as Profit / Quantity.

Create another column, High\_Sales, which labels rows as Yes if Sales > 1000, else No.

import pandas as pd

data = {

'Sales': [1500, 800, 1200, 3000, 700],

'Profit': [200, 150, 300, 500, 100],

'Quantity': [50, 30, 40, 60, 20],

'Region': ['East', 'West', 'East', 'East', 'West']

}

df = pd.DataFrame(data)

1. Data Filtering:

filtered\_data = df[df['Sales'] > 1000] # Extract rows where sales > 1000

east\_sales = df[df['Region'] == 'East'] # Extract sales records for 'East'

2. Data Processing:

df['Profit\_Per\_Unit'] = df['Profit'] / df['Quantity'] # Calculate Profit\_Per\_Unit

df['High\_Sales'] = df['Sales'].apply(lambda x: 'Yes' if x > 1000 else 'No') # Create High\_Sales columns

print(df)