import pandas as pd

# Creating a new dataset

data = {

"Employee\_ID": [101, 102, 103, 104, 105, 106],

"Name": ["Rajesh", "Meena", "Suresh", "Anita", "Vijay", "Neeta"],

"Department": ["HR", "IT", "Finance", "IT", "Finance", "HR"],

"Age": [29, 35, 45, 32, 50, 28],

"Salary": [70000, 85000, 95000, 64000, 120000, 72000],

"City": ["Delhi", "Mumbai", "Bangalore", "Chennai", "Delhi", "Mumbai"]

}

df = pd.DataFrame(data)

print("Original DataFrame:")

print(df)

**# Exercise 1:**

df.rename(columns={"Salary": "Annual Salary", "City": "Location"}, inplace=True)

print(df)

**# Exercise 2:**

df.drop(columns=["Location"], inplace=True)

print(df)

**# Exercise 3:**

df.drop(df[df["Name"] == "Suresh"].index, inplace=True)

print(df)

**# Exercise 4:**

df.loc[df["Name"] == "Meena", "Annual Salary"] = None

df["Annual Salary"].fillna(df["Annual Salary"].mean(), inplace=True)

print(df)

**# Exercise 5:**

df["Seniority"] = df["Age"].apply(lambda x: "Senior" if x >= 40 else "Junior")

print(df)

**# Exercise 6:**

grouped\_df = df.groupby("Department")["Annual Salary"].mean().reset\_index()

grouped\_df.rename(columns={"Annual Salary": "Average Salary"}, inplace=True)

print(grouped\_df)