Q2) Explain all pandas operations

→ 1) Importing pandas

import pandas as pd

2) Reading a dataset

df = pd.read_csv('filename.csv')   # load csv file into DataFrame.

3) Viewing the data.

df.head()   # First 5 rows

df.tail()   # last 5 rows

df.sample(5)   # Random 5 rows

4) Basic information

df.shape

df.coloumns

df.dtypes

df.info()

5) Summary statistics

df.describe()

6) Slecteching columns

df['column-name']

df[['col1', 'col2']]

7) filtering Rows

df[df['column']>50]

8) Adding New columns

df['new-col'] = df['col1'] + df['col2']

9) Deleting Columns

df.drop ('col-name', axis=1, inplace= True)

10) Handling Missing Values

df.isnull ().sum()

df.fillna (0)

df.dropna()

11) Sorting Data

df.sort_values (by = 'column', ascending = False)

12) Grouping Date

df.groupby ('category_column')['value_column'].mean()

13) Merging Data frames

pd.merge (df1, df2, on = 'common-column')

14) Removing Duplicates.

df.drop_duplicates()

15) Exporting to CSV

df.to_csv ('output-csv', index = false)