

Q 2 Explain all pandas operations

1) Importing pandas

import pandas as pd.

2) Reading a dataset

df = pd.read_csv('file name.csv')

3) Viewing the data

df.head() \neq first 5 rows

df.tail() \neq last 5 rows

df.sample(s) \neq Random 5 rows

4) Basic Information

df.shape

df.columns

df.dtypes

df.info()

5) Summary Statistics

df.describe()

6) Selecting Columns.

df['column-name']

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

- 7) filtering Rows
`df[df['column'] > 50]`
- 8) Adding New Columns
`df['new-col'] = df['col1']`
- 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 data
`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)`