

In [5]: `!pip install pyspark`

Apache Spark **is** unified analytics engine **for** large scale data processing

Requirement already satisfied: pyspark in c:\users\aviral\appdata\local\programs\python\python311\lib\site-packages (3.5.1)

Requirement already satisfied: py4j==0.10.9.7 in c:\users\aviral\appdata\local\programs\python\python311\lib\site-packages (from pyspark) (0.10.9.7)

In [6]: `import pyspark`

In [25]: `import pandas as pd
pd.read_csv('D:\Data Analysis\Python\python projects\Test.csv')
##type(pd.read_csv('D:\Data Analysis\Python\python projects\Test.csv'))`

Out[25]:

	Name	Age
0	Nishant	33
1	Neha	30
2	Aviral	24
3	Kanti	55

In [12]: `from pyspark.sql import SparkSession`

#SparkSession.builder: This initializes the builder for creating a SparkSession.

#appName('DataAnalysisTesting'): This sets the name of your Spark application to "Data"

#getOrCreate(): This method either returns an existing SparkSession or creates a new c

In [17]: `spark=SparkSession.builder.appName('D:\Data Analysis\Python\python projects\Testing').`

In [18]: `spark`

Out[18]: **SparkSession - in-memory**

SparkContext

Spark UI

Version v3.5.1

Master local[*]

AppName D:\Data Analysis\Python\python projects\Testing

In [19]: `df_pyspark=spark.read.csv('D:\Data Analysis\Python\python projects\Test.csv')`

In [20]: `df_pyspark.show()`

```

+-----+-----+
|   _c0|_c1|
+-----+-----+
|   Name|Age|
|Nishant| 33|
|   Neha| 30|
| Aviral| 24|
|   Kanti| 55|
+-----+-----+

```

```

In [ ]: spark.read.option('header','true').csv('D:\Data Analysis\Python\python projects\Test.csv')

#spark.read.csv: This reads a CSV file and returns a DataFrame.
#header=True: This parameter indicates that the first row of the CSV file contains column headers.
#inferSchema=True: This tells Spark to automatically infer the data types of the columns.

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In [27]: type(df_pyspark)
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Out[27]: pyspark.sql.dataframe.DataFrame
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In [29]: df_pyspark.head(4)
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Out[29]: [Row(_c0='Name', _c1='Age'),
          Row(_c0='Nishant', _c1='33'),
          Row(_c0='Neha', _c1='30'),
          Row(_c0='Aviral', _c1='24')]

```

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In [ ]:
```