BIG DATA ANALYTICS

Installation of pyspark on windows

Step 1: Install Java

java -version

OUTPUT:

java version "22.0.2" 2024-07-16

Java(TM) SE Runtime Environment (build 22.0.2+9-70)

Java HotSpot(TM) 64-Bit Server VM (build 22.0.2+9-70, mixed mode, sharing)

Step 2: Install Python

python -version

OUTPUT:

Python 3.13.5

Step 3: Install Spark

OUTPUT:

spark-4.0.0-bin-hadoop3.tgz

17-08-2025 13:39

Compressed Archi...

5,30,708 KB

Step 4: Install Hadoop Winutils

OUTPUT:

winutils.exe

17-08-2025 13:25

Application

117 KR

Step 5: Install PySpark pip install pyspark

OUTPUT:

Defaulting to user installation because normal site-packages is not writeable Requirement already satisfied: pyspark in c:\users\prab\appdata\roaming\python\python313\site-packages

```
(4.0.0) Requirement already satisfied: py4j==0.10.9.9 in c:\users\prab\appdata\roaming\python\python313\site-packages (from pyspark) (0.10.9.9) [notice] A new release of pip is available: 25.0.1 -> 25.2 [notice] To update, run: python.exe -m pip install --upgrade pip

Step 6: Verify the Installation import pyspark from pyspark.sql import SparkSession spark = SparkSession.builder.appName("StudentExample").getOrCreate() print(spark.version)

OUTPUT:

3.5.1
```

Step 7: Running a example pyspark code to check the working of successful installation

```
data = [
    ("Sudharsan", "Maths", 95),
    ("Priya", "Physics", 88),
    ("Arun", "Chemistry", 92),
    ("Meena", "Biology", 85),
]
df = spark.createDataFrame(data, ["Name", "Subject", "Marks"])
df.show()
```

OUTPUT:

Name	Subject	Marks
Sudharsan	Maths	95
Priya	Physics	88
Arun	Chemistry	92
Meena	Biology	85