**Apache Hadoop** and **Apache Spark** were used to create applications on a Single node Machine as follows.

**Apache Hadoop:**

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Hadoop Distributed File System – Importing, Exporting, and Processing Data:

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1. Reading and writing data to HDFS

2. Reading and writing data to Sequence Files

3. Importing and exporting data into HDFS using the Hadoop shell commands

4. Importing data from MySQL into HDFS using Sqoop

5. Exporting data from HDFS into MySQL using Sqoop

6. Configuring Sqoop for Microsoft SQL Server

7. Using Flume to load data into HDFS

**Apache Spark:**

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1. Installed Spark from binaries

2. Building the Spark source code with SBT

3. Deploying Spark on a cluster in standalone mode

4. Loading data from the local file system

5. Loading data from HDFS

6. Loading data from and to relational databases

7. Streaming Twitter data

8. Streaming using Kafka

**Hadoop Installations:**

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NO Hadoop & Eco-Systems Version

1 HADOOP 2.6.0

2 SPARK 1.6.0

3 SCALA 2.11.7

4 MAVEN 3.0.4

5 SBT 0.13.9

6 ANT 1.9.6

7 HIVE 1.2.1

8 DB-DERBY 10.10.1.1

9 SQOOP 1.4.6

10 FLUME 1.5.2

11 KAFKA 0.8.2

12 ZOOKEEPER 3.4.6

13 HBASE 1.1.2

14 PHOENIX 4.4.0

15 TOMCAT 7.0.32

16 OOZIE 4.2.0

17 PIG 0.15.0

18 AVRO 1.7.7

19 ORC 1.0.0

20 PARQUET 1.8.1