# Hadoop Developer





## Introduction to Hadoop

- 1. RDBMS Vs Hadoop
- 2. Difference in between Mysql and Hadoop
- 3. Why Hadoop is better that Mysql??
- 4. 5 V's of big data

## Introduction to Java

- 1. Basics of Java required for Hadoop
- 2. OOPS Class, Object and Interface
- 3. Inheritance and types of inheritance
- 4. Method overriding and overloading
- 5. Exception Handling

### Introduction to SQL

- 1. Basics of Sql required for Hadoop
- 2. DML,DDL statements

## Introduction to HDFS (Storage) & Understanding cluster environment

- 1. NameNode and DataNodes
- 2. HDFS has a master/slave architecture
- 3. Overview of Hadoop Daemons
- 4. Hadoop FS and Processing Environment's UIs
- 5. Block Replication
- 6. How to read and write files
- 7. Hadoop FS shell commands
- 8. MR1.x vs 2.x





## **Understanding Map-Reduce Basics**

- 1. The introduction of MapReduce.
- 2. MapReduce Architecture
- 3. Data flow in MapReduce
- 4. How MapReduce Works
- 5. Writing and Executing the Basic MapReduce Program using Java

## TOOLS

## A. SQOOP:

Sqoop architecture
Sqoop commands
Sqoop practical implementation
Importing data to HDFS
Importing data to Hive
Exporting data to RDBMS
Sqoop show tables, databases, eval
Sqoop jobs

#### B. HIVE:

Hive Architecture
Hive Query Language (HQL)
Managed and External Tables
Partitioning & Bucketing
UDF in hive
Working with different file formats
JDBC, ODBC connection to Hive
Hands on Multiple Real Time datasets.





#### C. PIG:

Pig Latin (Scripting language for Pig)
Schema and Schema-less data in Pig
Structured, Semi-Structure data processing in Pig
Built-in functions
UDF in pig

#### D. HBASE:

Introduction to HBASE
Basic Configurations of HBASE
Fundamentals of HBase
What is NoSQL?
HBase Data Model
Table and Row
Column Family and Column Qualifier
Cell and its Versioning
Get commands
Scan -Put commands
Namespace and drop tables
Hive table with hbase data

#### E. Oozie

Introduction to Oozie
Designing workflow jobs
Job scheduling using Oozie
Time based job scheduling
Oozie Conf files





# F. Apache Flume:

Introduction to flume Source, Sink and Channel Fetching twitter data

## G. Introduction to Spark:

Overview of Spark, Scala and its features

