

C. K. Pithawalla College of Engineering & Technology

Department of Computer Engineering

Lab Assignment

Big Data Analytics (Subject Code - 2180710)

No.	Problem Statement
1.1	Understand and demonstrate concepts of various collection types such as List, Set and Map in Java.
1.2	Store the basic information about students such as roll no, name, date of birth and address of student using various collection types.
2.1	Installation and integration of MongoDB with PHP on Apache Web server on Ubuntu platform.
2.2	Demonstrate basic CRUD operations and aggregate functions in MongoDB.
2.3	Design web based application for Student registration using PHP and MongoDB. Fields to be manage for student are : <enrolment_no, name, email, contact_no, date_of_birth, branch, address, tuition_fees> Implement the following, <ul style="list-style-type: none"><li>• Register new student.</li><li>• Get list of registered students.</li><li>• Update registration details.</li><li>• Generate branch wise student registration summary.</li><li>• Delete registration for any student.</li></ul>
3.1	Installation of Hadoop on Ubuntu platform for single-node and multi-node architecture.
3.2	To understand the overall programming architecture using Map Reduce API
3.3	Develop Map Reduce Work Application
4.1	Installation of Hive and Pig on Hadoop Ecosystem.
4.2	Creating the HDFS tables and loading them in Hive and learn joining of tables in Hive
5.1	Installation of Apache Spark.
5.2	Implement and demonstrate WordCount application in Apache Spark.

Subject Coordinators