

# Vidya Jyothi Institute of Technology

Department of Computer Science and Engineering

IV year I sem(Professional Elective)

## Big Data Analytics Lab

### LIST OF EXPERIMENTS

#### Week 1, 2:

1. Implement the following Data structures in Java

- a) Linked Lists                      b) Stacks                      c) Queues                      d) Set                      e) Map

#### Week 3

2. Perform setting up and Installing Hadoop in Pseudo distributed mode.

#### Week 4:

3. Implement the following file management tasks in Hadoop:

- i. Adding files and directories
- ii. Retrieving files
- iii. Deleting files

Hint: A typical Hadoop workflow creates data files (such as log files) elsewhere and copies them into HDFS using one of the above command line utilities.

#### Week 5:

4. Run a basic Word Count Map Reduce program to understand Map-Reduce Paradigm.

#### Week 6:

5. Write a Map Reduce program that mines weather data.

Weather sensors collecting data every hour at many locations across the globe gather a large volume of log data, which is a good candidate for analysis with Map-Reduce, since it is semi structured and record-oriented.

#### Week 7:

6. Implement Matrix Multiplication with Hadoop Map Reduce

#### Week 8, 9:

7. Install and Run Pig then write Pig Latin scripts to sort, group, join, project, and filter your Data.

#### Week 10, 11:

8. i) Install and Run Hive then use Hive to create, alter, and drop databases, tables, views, Functions and indexes

ii) Performance techniques in Hive partitions, bucketing.

**Week 12:**

9. Migration from Mysql database to hive using Sqoop.