

# Assignment-1

## ECHELON INSTITUTE OF TECHNOLOGY

### Department of Computer Application

#### Big Data II (BCA-DS-311)

Course: BCA DS  
Date of Issue: 17<sup>nd</sup> March, 2025  
Course Unit included: 1<sup>st</sup> & 2<sup>nd</sup>  
Session: 2024-25

Semester: 6<sup>th</sup>  
Date of Submission: 24<sup>th</sup> Mar, 2025  
Assignment Number: 1<sup>st</sup>  
Max. Marks: 20

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**CO-1:** To introduce programming tools PIG & HIVE in Hadoop ecosystem.  
**CO-2:** Preparing for data summarization, query, and analysis.

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Q.N.	Question	CO	Revised Bloom's Taxonomy Level	Marks
Q.1	Define the <b>Writable Interface</b> in Hadoop and explain its significance in Hadoop I/O.	CO-2	RBTL-1	4
Q.2	Differentiate between <b>Writable</b> and <b>WritableComparable</b> in Hadoop with examples.	CO-2	RBTL-2	4
Q.3	Explain the <b>Pig Architecture</b> and its components with a simple diagram.	CO-2	RBTL-2	4
Q.4	List any four <b>Writable classes</b> in Hadoop and briefly describe their purpose.	CO-1	RBTL-1	4
Q.5	Describe the <b>Pig Latin data model</b> and explain how it handles different types of data.	CO-1	RBTL-2	4