Nagar Yuwak Shikshan Sanstha's
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
Hingna Road, Wanadongri, Nagpur - 441 110
NAAC A++
Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

Department of Computer Technology

Vision of the Department

To be a well-known centre for pursuing computer education through innovative pedagogy, value-based education and industry collaboration.

Mission of the Department

To establish learning ambience for ushering in computer engineering professionals in core and multidisciplinary area by developing Problem-solving skills through emerging technologies.

Session 2025-2026

Vision: To harness the power of artificial intelligence and data science to solve real-world problems and enhance human potential.	**Mission:** To acquire skills through coursework, projects, and internships, while actively engaging in research and collaboration with peers to innovate and apply AI solutions.

Program Educational Objectives of the program (PEO): (broad statements that describe the professional and career accomplishments)

PEO1	**Preparation**	**P: Preparation**	**Pep-CL abbreviation pronounce as Pep-si-lL easy to recall**
PEO2	**Core Competence**	**E: Environment (Learning Environment)**	
PEO3	**Breadth**	**P: Professionalism**	
PEO4	**Professionalism**	**C: Core Competence**	
PEO5	**Learning Environment**	**L: Breadth (Learning in diverse areas)**	

Program Outcomes (PO): (statements that describe what a student should be able to do and know by the end of a program)

Keywords of POs:
Engineering knowledge, Problem analysis, Design/development of solutions, Conduct Investigations of Complex Problems, Engineering Tool Usage, The Engineer and The World, Ethics, Individual and Collaborative Team work, Communication, Project Management and Finance, Life-Long Learning

PSO Keywords: Cutting edge technologies, Research

"I am an engineer, and I know how to apply engineering knowledge to investigate, analyse and design solutions to complex problems using tools for entire world following all ethics in a collaborative way with proper management skills throughout my life." *to contribute to the development of cutting-edge technologies and Research*.

Integrity: I will adhere to the Laboratory Code of Conduct and ethics in its entirety.

Prerana Bijekar 30 October 2025
Name and Signature of Student and Date
(Signature and Date in Handwritten)

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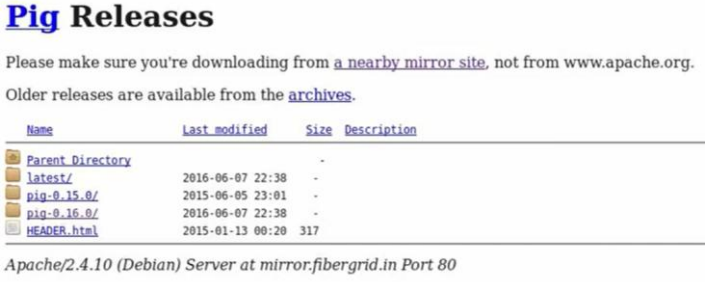
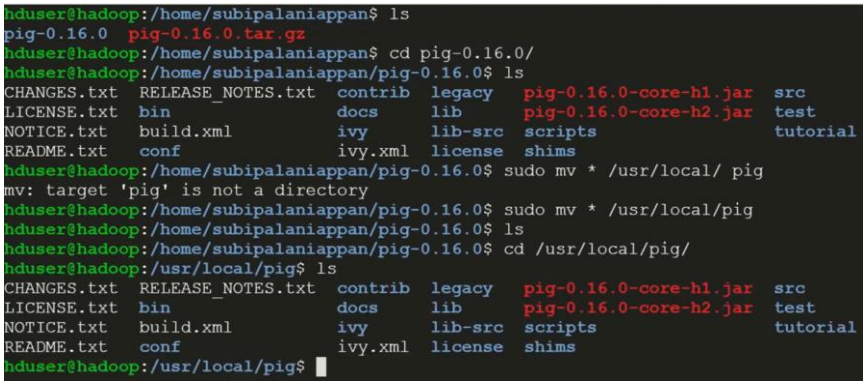
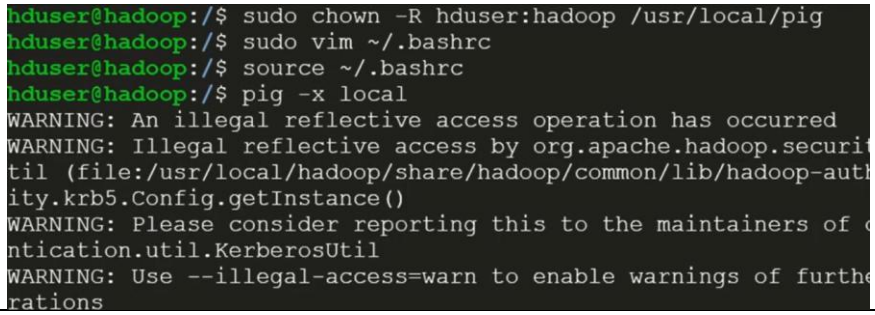
Session	2025-26 (ODD)	**Course Name**	BDH Lab
Semester	7	**Course Code**	22ADS704
Roll No	11	**Name of Student**	Prerana Bijekar

Practical Number	7
Course Outcome	**CO1:** Understand big data analytics and its business applications. **CO2:** Analyze the HADOOP and Map Reduce technologies associated with big data analytics. **CO3:** Apply Big Data Analytics Using Pig and Hive.
Aim	Installation of Apache Pig on Linux with Hadoop Integration
Theory (100 words)	Apache Pig is a high-level platform built on top of Hadoop for processing and analyzing large datasets using a scripting language called Pig Latin. It simplifies the development of MapReduce programs by providing easy-to-understand commands for data transformation, filtering, and aggregation. Installing Pig on a Linux system integrated with Hadoop allows users to execute Pig scripts that run as MapReduce jobs on the cluster. This integration enables efficient handling of structured and semi-structured data without writing complex Java code, making Pig a powerful tool for big data analytics.
Procedure and Execution (100 Words)	Steps of implementation: • Ensure Hadoop is installed and running. • Download and extract Apache Pig. • Configure environment variables in .bashrc (set PIG_HOME and update PATH). • Verify Java and Hadoop paths in Pig configuration. • Start Pig in local or MapReduce mode using pig command. • Run sample Pig Latin scripts to test Hadoop integration.
	Code:  **Pig Releases** Please make sure you're downloading from a nearby mirror site, not from www.apache.org. Older releases are available from the archives. Name Last modified Size Description Parent Directory - latest/ 2016-06-07 22:38 - pig-0.15.0/ 2015-06-05 23:01 - pig-0.16.0/ 2016-06-07 22:38 - HEADER.html 2015-01-13 00:20 317 *Apache/2.4.10 (Debian) Server at mirror.fibergrid.in Port 80*

<table>
<tr><td></td><td>



</td></tr>
<tr><td>Output Analysis</td><td>After installation, the pig shell starts successfully, displaying the grunt> prompt. Executing Pig Latin scripts (like word count) produces output stored in HDFS. Successful job completion messages confirm that Pig is properly integrated with Hadoop and capable of running MapReduce tasks.</td></tr>
<tr><td>Github Link</td><td>https://github.com/Prerana-Bijekar/BDH</td></tr>
<tr><td>Conclusion</td><td>Installing Apache Pig on Linux with Hadoop integration provides a simplified way to process large datasets using Pig Latin scripts. This setup enhances productivity by abstracting complex MapReduce logic and enabling efficient big data analysis within the Hadoop ecosystem.</td></tr>
</table>

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Plag Report (Similarity index < 12%)	
Date	30 October 2025