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 Artificial Intelligence & Data Science

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: Dream of where you want.	**Mission:** Means to achieve Vision

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.

Name and Signature of Student and Date
(Signature and Date in Handwritten)

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 Artificial Intelligence & Data Science

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	2025-26 (ODD)	**Course Name**	BIG DATA AND HADOOP-LAB
Semester	7 AIDS	**Course Code**	22ADS704
Roll No	03	**Name of Student**	**Debasrita Chattopadhyay**

Practical Number	05
Course Outcome	1. Understand big data analytics and its business applications. 2. Analyze the HADOOP and Map Reduce technologies associated with big data analytics. 3. Apply Big Data analytics Using Pig and Hive.
Aim	Perform Hive Operations: Create, Alter and Drop Databases, Tables, Views, and Indexes.
Problem Definition	Perform Hive Operations: Create, Alter and Drop Databases, Tables, Views, and Indexes.
Theory (100 words)	A database is a logical namespace in Hive to manage tables. Use the CREATE DATABASE statement to create a database. You may also use IF NOT EXISTS to avoid an error if the database you want to create already exists. You can add properties or modify a database with the ALTER DATABASE command. You can remove a database using the DROP DATABASE command; using CASCADE will delete all tables in the database. A table in Hive represents a format for storing structured data. You can create a table using the CREATE TABLE statement, and also define columns and their data types and file format. You can change tables with ALTER TABLE to rename, add, or replace columns or properties of the table. You can remove a table with the DROP TABLE command. A view is a virtual table, which is based on the result of a query. Views can be created with the CREATE VIEW command, and updated using ALTER VIEW to change the query definition.

Procedure and Execution (100 Words)	Steps of Implementation: - Database Create: CREATE DATABASE mydb; Alter: ALTER DATABASE mydb SET DBPROPERTIES (...); Drop: DROP DATABASE mydb CASCADE; Table Create: CREATE TABLE students (...); Alter: ALTER TABLE students RENAME TO learners; / ADD COLUMNS (...); Drop: DROP TABLE learners; View Create: CREATE VIEW v1 AS SELECT ...; Alter: ALTER VIEW v1 AS SELECT ...; Drop: DROP VIEW v1; Index Create: CREATE INDEX idx1 ON TABLE students(col) AS 'COMPACT'; Alter: ALTER INDEX idx1 ON students REBUILD; Drop: DROP INDEX idx1 ON students;
	Code: sudo apt install openjdk-8-jdk -y 2 sudo update-alternatives --config java 3 /usr/lib/jvm/java-8-openjdk-amd64/bin/java 4 java -version 5 hive 6 ls /usr/local/hive 7 export HIVE_HOME=/usr/local/hive 8 export PATH=$PATH:$HIVE_HOME/bin 9 hive --version 10 ls /usr/local/hadoop 11 export HADOOP_HOME=/usr/local/hadoop 12 export HADOOP_CONF_DIR=$HADOOP_HOME/etc/hadoop 13 export PATH=$PATH:$HADOOP_HOME/bin:$HADOOP_HOME/sbin 14 export HIVE_HOME=/usr/local/hive 15 export PATH=$PATH:$HIVE_HOME/bin

```
16  hadoop version
17  hive --version
18  hive
19  java -version
20  export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
21  export PATH=$JAVA_HOME/bin:$PATH
22  echo $JAVA_HOME
23  java -version
24  hive
25  # Check current Java
26  java -version
27  # If needed, install Java 8 (Ubuntu example)
28  sudo apt install openjdk-8-jdk
29  # Set Java 8 for Hive
30  export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
31  export PATH=$JAVA_HOME/bin:$PATH
32  hive
33  sudo apt update
34  sudo apt install openjdk-8-jdk -y
35  export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
36  export PATH=$JAVA_HOME/bin:$PATH
37  java -version
38  hive
39  # Install Java 8 (if not already installed)
40  sudo apt update
41  sudo apt install openjdk-8-jdk -y
42  # Set Java 8 as default for this session
43  export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
44  export PATH=$JAVA_HOME/bin:$PATH
45  # Verify Java version
46  java -version
47  # Now start Hive
48  hive
49  echo 'export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-
amd64; export PATH=$JAVA_HOME/bin:$PATH' >> ~/.bashrc
&& source ~/.bashrc
50  hive
51  beeline -u jdbc:hive2://localhost:10000
52  hive --service hiveserver2 &
53  beeline -u jdbc:hive2://localhost:10000
54  -- Create database
55  CREATE DATABASE IF NOT EXISTS olympics;
56  USE olympics;
57  -- Create external table
```

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.

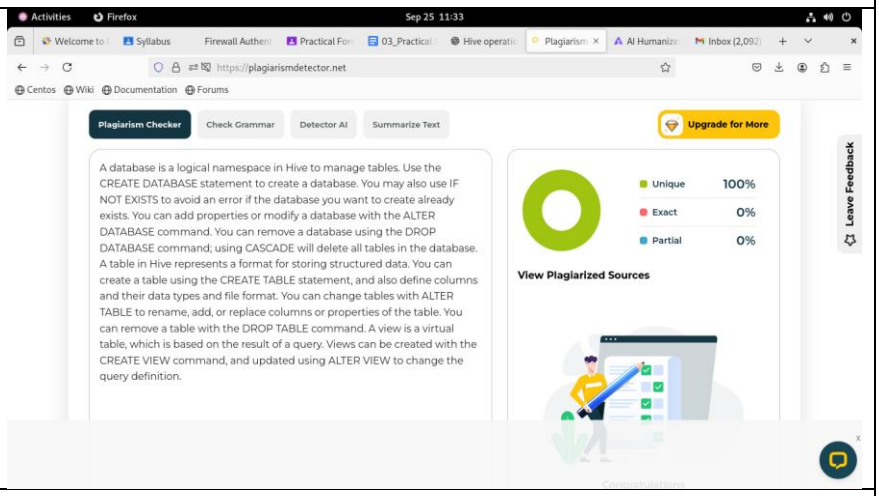
	58 CREATE EXTERNAL TABLE IF NOT EXISTS olympic_data (59)
	Output: 
Output Analysis	Each Hive operation either creates, modifies, or removes a database, table, view, or index as specified.

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.

Link of student Github profile where lab assignment has been uploaded	
Conclusion	Hive Operations: Create, Alter and Drop Databases, Tables, Views, and Indexes implemented successfully.
Plag Report (Similarity index < 12%)	
Date	**21/ 08/ 25**