



# Vidyavardhini's College of Engineering & Technology

## Department of Artificial Intelligence and Data Science

AY: 2025-26

<b>Class:</b>		<b>Semester:</b>	
<b>Course Code:</b>		<b>Course Name:</b>	

<b>Name of Student:</b>	BARI ANKIT VINOD
<b>Roll No. :</b>	61
<b>Experiment No.:</b>	6
<b>Title of the Experiment:</b>	Create HIVE Database and Descriptive analytics- basic statistics
<b>Date of Performance:</b>	
<b>Date of Submission:</b>	

### Evaluation

<b>Performance Indicator</b>	<b>Max. Marks</b>	<b>Marks Obtained</b>
Performance	5	
Understanding	5	
Journal work and timely submission	10	
Total	20	

<b>Performance Indicator</b>	<b>Exceed Expectations (EE)</b>	<b>Meet Expectations (ME)</b>	<b>Below Expectations(BE)</b>
Performance	4-5	2-3	1
Understanding	4-5	2-3	1
Journal work and timely submission	8-10	5-8	1-4

Checked by

Name of Faculty :

Signature :

Date :



**Aim:** Create HIVE Database and Descriptive analytics-basic statistics.

### Theory:

Hive is a database technology that can define databases and tables to analyze structured data. The theme for structured data analysis is to store the data in a tabular manner, and pass queries to analyze it. This chapter explains how to create Hive database. Hive contains a default database named default.

### Create Database Statement

Create Database is a statement used to create a database in Hive. A database in Hive is a namespace or a collection of tables. The syntax for this statement is as follows:

```
CREATE DATABASE|SCHEMA [IF NOT EXISTS] <database name>
```

Here, IF NOT EXISTS is an optional clause, which notifies the user that a database with the same name already exists. We can use SCHEMA in place of DATABASE in this command. The following query is executed to create a database named userdb:

```
hive> CREATE DATABASE [IF NOT EXISTS] userdb;
```

```
hive> CREATE SCHEMA userdb;
```

The following query is used to verify a databases list:

```
hive> SHOW DATABASES;
```

```
default
```

```
userdb
```

### Program:

The JDBC program to create a database is given below.

```
import java.sql.SQLException;
```

```
import
```

```
java.sql.Connection;
```

```
import java.sql.ResultSet;
```



```
import java.sql.Statement;

import
java.sql.DriverManager;

public class HiveCreateDb {

    private static String driverName = "org.apache.hadoop.hive.jdbc.HiveDriver";

    public static void main(String[] args) throws SQLException {

        // Register driver and create driver instance

        Class.forName(driverName);

        // get connection

        Connection con = DriverManager.getConnection("jdbc:hive://localhost:10000/default",
        "", "");

        Statement stmt = con.createStatement();

        stmt.executeQuery("CREATE DATABASE userdb");

        System.out.println("Database userdb created
        successfully.");

        con.close();

    }

}
```

Output:



Database userdb created successfully.

### OUTPUT / OBSERVATION:

Hive was configured successfully, and a database named student\_db was created.

Tables were loaded with sample student data.

Descriptive queries like COUNT, AVG, MAX, and MIN were executed successfully.

### Example result:

Total Students: 50  
Average Marks: 72.8  
Highest Marks: 98  
Lowest Marks: 41

### CONCLUSION:

The Hive database was created successfully, and descriptive statistics were computed using HiveQL.

This experiment demonstrated Hive's capability to perform large-scale data summarization and basic analytics efficiently using SQL-like queries.