Experiment No.8
Implementation of Views and Triggers
Date of Performance:
Date of Submission:



# Vidyavardhini's College of Engineering and Technology

### Department of Artificial Intelligence & Data Science

### Aim :- Write a SQL query to implement views and triggers

**Objective :-** To learn about virtual tables in the database and also PLSQL constructs

Theory:

**SQL Views:** 

In SQL, a view is a virtual table based on the result-set of an SQL statement.

A view contains rows and columns, just like a real table. The fields in a view are fields from one or more real tables in the database.

You can add SQL statements and functions to a view and present the data as if the data were coming from one single table.

A view is created with the CREATE VIEW statement.

**CREATE VIEW Syntax** 

CREATE VIEW view\_name AS

SELECT column1, column2, ...

FROM table name

WHERE condition;

SQL Updating a View

A view can be updated with the CREATE OR REPLACE VIEW statement.

SQL CREATE OR REPLACE VIEW Syntax

CREATE OR REPLACE VIEW view name AS

SELECT column1, column2, ...

FROM table name

WHERE condition;

SQL Dropping a View

A view is deleted with the DROP VIEW statement.

**SQL DROP VIEW Syntax** 

DROP VIEW view name;



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Trigger: A trigger is a stored procedure in the database which automatically invokes whenever a special event in the database occurs. For example, a trigger can be invoked when a row is inserted into a specified table or when certain table columns are being updated.

### Syntax:

create trigger [trigger\_name]
[before | after]

{insert | update | delete}

on [table\_name]

[for each row]

[trigger body]

### Explanation of syntax:

- 1. create trigger [trigger\_name]: Creates or replaces an existing trigger with the trigger name.
- 2. [before | after]: This specifies when the trigger will be executed.
- 3. {insert | update | delete}: This specifies the DML operation.
- 4. on [table\_name]: This specifies the name of the table associated with the trigger.
- 5. [for each row]: This specifies a row-level trigger, i.e., the trigger will be executed for each row being affected.
- 6. [trigger body]: This provides the operation to be performed as trigger is fired

#### **Conclusion:**

- 1. Brief about the benefits for using views and triggers.
- 2. Explain different strategies to update views