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<b>UID:</b>	2021300002, 2021300016, 2021300005
<b>SUBJECT</b>	DBMS
<b>EXPERIMENT NO :</b>	7
<b>DATE OF PERFORMANCE</b>	11/11/22
<b>DATE OF SUBMISSION</b>	13/11/22
<b>AIM:</b>	<b>To study VIEW command in SQL</b>
<b>THEORY</b>	<p>In SQL, a view is a virtual table based on the result-set of an SQL statement.</p> <p>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.</p> <p>You can add SQL statements and functions to a view and present the data as if the data were coming from one single table.</p> <p>A view is created with the <b>CREATE VIEW</b> statement.</p> <p><b>Note:</b> A view always shows up-to-date data! The database engine recreates the view, every time a user queries it.</p>

## SQL QUERIES\COMMANDS:

### Creating View in SQL:

```
CREATE VIEW CourseDetails AS  
SELECT Fee, Course_Name  
FROM courses  
WHERE Course_Code < 1015;
```

### Printing view in SQL:

```
Select * from CourseDetails;
```

The screenshot shows a SQL IDE interface with a toolbar at the top. The main editor displays the query: `Select * from CourseDetails;`. Below the editor, the 'Result Grid' shows the output of the query, which is a table with two columns: 'Fee' and 'Course\_Name'. The table contains five rows of data:

Fee	Course_Name
150000	JEE
180000	JEE ADVANCED
130000	NEET
170000	NEET PG

Below the result grid, the 'Output' pane shows the execution log. It lists five actions with their respective times, messages, and durations. The first two actions are errors, and the last three are successful.

#	Time	Action	Message	Duration / Fetch
1	13:53:46	Use database coaching	Error Code: 1064. You have an error in your SQL syntax; check the manual...	0.000 sec
2	13:54:09	Use coaching	Error Code: 1049. Unknown database 'coaching'	0.000 sec
3	13:54:29	Use coachingclasses	0 row(s) affected	0.000 sec
4	13:55:08	CREATE VIEW CourseDetails AS SELECT Fee, Course_Name FROM cour...	0 row(s) affected	0.015 sec
5	13:58:38	Select * from CourseDetails LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000

### Updating view in SQL:

```
CREATE OR REPLACE VIEW CourseDetails AS  
SELECT Course_Code, Course_Name  
FROM courses  
WHERE Course_Code < 1015;
```

## Printing view in SQL:

SELECT \* FROM CourseDetails;

The screenshot shows a SQL IDE interface. At the top, a query editor contains the SQL statement: `Select * from CourseDetails`. Below the editor, a 'Result Grid' displays the following data:

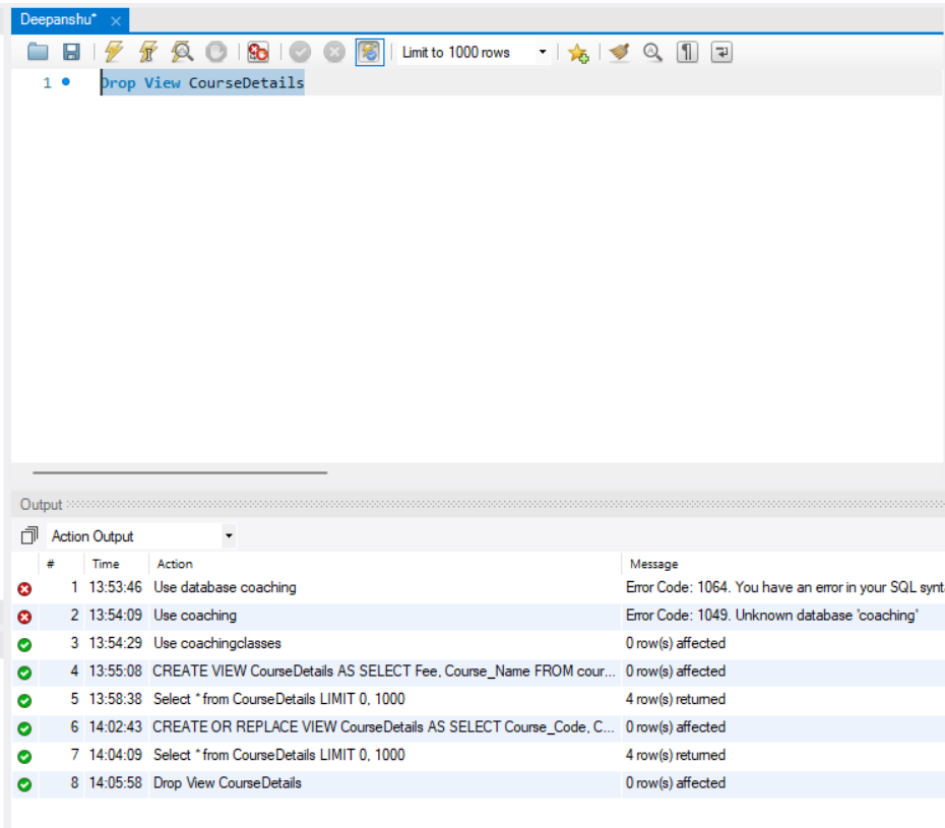
Course_Code	Course_Name
1011	JEE
1012	JEE ADVANCED
1013	NEET
1014	NEET PG

Below the result grid, an 'Output' pane shows a log of actions and messages:

#	Time	Action	Message
1	13:53:46	Use database coaching	Error Code: 1064. You have an error in your SQL syntax; check the manual...
2	13:54:09	Use coaching	Error Code: 1049. Unknown database 'coaching'
3	13:54:29	Use coachingclasses	0 row(s) affected
4	13:55:08	CREATE VIEW CourseDetails AS SELECT Fee, Course_Name FROM cour...	0 row(s) affected
5	13:58:38	Select * from CourseDetails LIMIT 0, 1000	4 row(s) returned
6	14:02:43	CREATE OR REPLACE VIEW CourseDetails AS SELECT Course_Code, C...	0 row(s) affected
7	14:04:09	Select * from CourseDetails LIMIT 0, 1000	4 row(s) returned

## Dropping a View:

Drop View CourseDetails;

	 <p>The screenshot shows the SQL Developer interface. The top toolbar includes icons for file operations, execution, and settings. The main query window contains the text 'Drop View CourseDetails'. Below the query window is the 'Output' pane, which is set to 'Action Output'. It displays a table of actions performed during the session:</p> <table><tr><th>#</th><th>Time</th><th>Action</th><th>Message</th></tr><tr><td>1</td><td>13:53:46</td><td>Use database coaching</td><td>Error Code: 1064. You have an error in your SQL synt</td></tr><tr><td>2</td><td>13:54:09</td><td>Use coaching</td><td>Error Code: 1049. Unknown database 'coaching'</td></tr><tr><td>3</td><td>13:54:29</td><td>Use coachingclasses</td><td>0 row(s) affected</td></tr><tr><td>4</td><td>13:55:08</td><td>CREATE VIEW CourseDetails AS SELECT Fee, Course_Name FROM cour...</td><td>0 row(s) affected</td></tr><tr><td>5</td><td>13:58:38</td><td>Select * from CourseDetails LIMIT 0, 1000</td><td>4 row(s) returned</td></tr><tr><td>6</td><td>14:02:43</td><td>CREATE OR REPLACE VIEW CourseDetails AS SELECT Course_Code, C...</td><td>0 row(s) affected</td></tr><tr><td>7</td><td>14:04:09</td><td>Select * from CourseDetails LIMIT 0, 1000</td><td>4 row(s) returned</td></tr><tr><td>8</td><td>14:05:58</td><td>Drop View CourseDetails</td><td>0 row(s) affected</td></tr></table>	#	Time	Action	Message	1	13:53:46	Use database coaching	Error Code: 1064. You have an error in your SQL synt	2	13:54:09	Use coaching	Error Code: 1049. Unknown database 'coaching'	3	13:54:29	Use coachingclasses	0 row(s) affected	4	13:55:08	CREATE VIEW CourseDetails AS SELECT Fee, Course_Name FROM cour...	0 row(s) affected	5	13:58:38	Select * from CourseDetails LIMIT 0, 1000	4 row(s) returned	6	14:02:43	CREATE OR REPLACE VIEW CourseDetails AS SELECT Course_Code, C...	0 row(s) affected	7	14:04:09	Select * from CourseDetails LIMIT 0, 1000	4 row(s) returned	8	14:05:58	Drop View CourseDetails	0 row(s) affected
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<b>CONCLUSION:</b>	<p>In this experiment, we learnt what is view in SQL and how we can use that to create a virtual table.</p>																																				