| NAMRATHA V | 7 |
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| 1BM17CS151 | |
| C3 | |

LAB 9- Hive: Employee Table

Date: 21-12-2020

Write Queries in Hive to do the following

- Create an external table named with the following attributes -> Emp_ID >Emp_Name -> Designation -> Salary
- 2. Load data into table from a given file
- 3. Create a view to Generate a query to retrieve the employee details who earn a salary of more than Rs 30000.
- 4. Alter the table to add a column Dept_Id and Generate a query to retrieve the employee details in order by using Dept_Id
- 5. Generate a query to retrieve the number of employees in each department whose salary is greater than 30000
- 6. Create another table Department with attributes -> Dept_Id ->Dept_name >Emp_Id
- 7. Display the cumulative details of each employee along with department details
- 1. Create an external table named with the following attributes -> Empl_ID ->Emp_Name -> Designation -> Salary

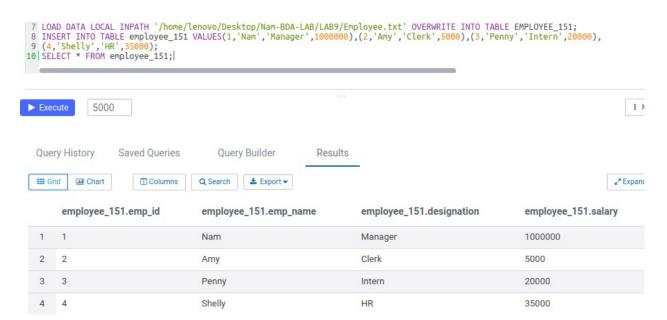
```
>CREATE DATABASE IF NOT EXISTS EMPLOYEES_151 COMMENT 'EMPLOYEE
Details' WITH DBPROPERTIES('creator'='Namratha');
>SHOW DATABASES;
>DESCRIBE DATABASE EMPLOYEE_151;
>USE EMPLOYEES_151;
> CREATE EXTERNAL TABLE IF NOT EXISTS EMPLOYEE_151(EMP_ID
INT,EMP_NAME STRING,DESIGNATION STRING,SALARY FLOAT) ROW FORMAT
DELIMITED FIELDS TERMINATED BY '\T' LOCATION '/EMPLOYEE_INFO';
>DESCRIBE FORMATTED EMPLOYEE 151;
```

4 USE EMPLOYEES_151;
5 | CREATE EXTERNAL TABLE IF NOT EXISTS EMPLOYEE_151 (Emp_ID INT,Emp_Name STRING,Designation STRING,Salary FLOAT)
6 | ROW FORMAT DELIMITED FIELDS TERMINATED BY '\t' LOCATION '/EMPLOYEE_INFO';
7 | DESCRIBE FORMATTED EMPLOYEE_151;

| | col_name | data_type | comme |
|----|------------------------------|------------------------------------|--------|
| 3 | emp_id | int | |
| 4 | emp_name | string | |
| 5 | designation | string | |
| 6 | salary | float | |
| 7 | | NULL | NULL |
| 8 | # Detailed Table Information | NULL | NULL |
| 9 | Database: | default | NULL |
| 10 | Owner: | root | NULL |
| 11 | CreateTime: | Sun Dec 20 04:38:18 UTC 2020 | NULL |
| 12 | LastAccessTime: | UNKNOWN | NULL |
| 13 | Retention: | 0 | NULL |
| 14 | Location: | hdfs://namenode:8020/EMPLOYEE_INFO | NULL |
| 15 | Table Type: | EXTERNAL_TABLE | NULL |
| 16 | Table Parameters: | NULL | NULL |
| 17 | | EXTERNAL | TRUE |
| 18 | | transient_lastDdlTime | 160843 |
| 19 | | NULL | NULL ^ |

2. Load data into table from a given file

>INSERT INTO TABLE EMPLOYEE_151
VALUES(1,'Nam','Manager',1000000),(2,'Amy','Clerk',50000),(3,'Pen
ny','Intern',20000),(4,'Shelly','HR',35000);
>SELECT * FROM EMPLOYEE_151;



3. Create a view to Generate a query to retrieve the employee details who earn a salary of more than Rs 30000.

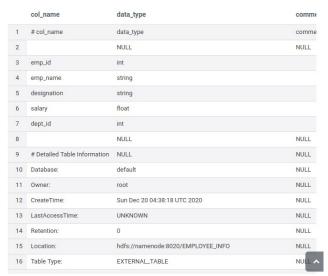
>CREATE VIEW EMPLOYEE_VIEW AS SELECT * FROM EMPLOYEE_151 WHERE
SALARY>30000;
>SELECT * FROM EMPLOYEE VIEW;

| 10 CREATE VIEW EMPLOYEE_VIEW AS SELECT * FROM employee_151 WHERE Salary>30000; 11 SELECT * FROM EMPLOYEE_VIEW; | | | | | | | |
|--|----------------------|------------------------|---------------------------|----------------------|--|--|--|
| | employee_view.emp_id | employee_view.emp_name | employee_view.designation | employee_view.salary | | | |
| 1 | 1 | Nam | Manager | 1000000 | | | |
| 2 | 4 | Shelly | HR | 35000 | | | |

4. Alter the table to add a column Dept_Id and Generate a query to retrieve the employee details in order by using Dept_Id

>ALTER TABLE EMPLOYEE_151 ADD COLUMNS (DEPT_ID INT); >DESCRIBE FROMATTED EMPLOYEE 151;

12 ALTER TABLE EMPLOYEE_151 ADD COLUMNS (Dept_ID INT);
13 DESCRIBE FORMATTED EMPLOYEE_151;



INSERT INTO TABLE EMPLOYEE_151 VALUES(1,'Nam','Manager',10000000,1),(2,'Amy','Clerk',50000,2),(3,'Penny','Intern',20000,3),(4,'Shelly','HR',35000,3);
SELECT * FROM EMPLOYEE_151;

| 1 | Nam | Manager | 10000000 | 1 | |
|---|--------|---------|----------|---|--|
| 2 | Amy | Clerk | 50000 | 2 | |
| 3 | Penny | Intern | 20000 | 3 | |
| 4 | Shelly | HR | 35000 | 3 | |

5. Generate a query to retrieve the number of employees in each department whose salary is greater than 30000

SELECT DEPT_ID, COUNT(DEPT_ID) FROM EMPLOYEE_151 WHERE SALARY >
30000 GROUP BY DEPT_ID;

SELECT DEPT_ID, COUNT(DEPT_ID) FROM EMPLOYEE_151 WHERE SALARY > 30000 GROUP BY DEPT_ID;

| dept_id | _c1 |
|---------|-----|
| NULL | 0 |
| 1 | 1 |
| 2 | 1 |
| 3 | 1 |

6. Create another table Department with attributes -> Dept_Id ->Dept_name ->Emp_Id

CREATE EXTERNAL TABLE IF NOT EXISTS DEPARTMENT_151(DEPT_ID INT, DEPT_NAME STRING, EMP_ID INT) ROW FORMAT DELIMITED FIELDS TERMINATED BY '\T' LOCATION '/DEPARTMENT';

CREATE EXTERNAL TABLE IF NOT EXISTS DEPARTMENT_151(DEPT_ID INT, DEPT_NAME STRING, EMP_ID INT)

ROW FORMAT DELIMITED FIELDS TERMINATED BY '\T' LOCATION '/DEPARTMENT';

DESCRIBE FORMATTED DEPARTMENT_151;

| col_name | data_type | comment |
|------------|-----------|---------|
| # col_name | data_type | comment |
| | NULL | NULL |
| dept_id | int | |
| dept_name | string | |
| emp_id | int | |

INSERT INTO TABLE DEPARTMENT_151 VALUES(1, 'Management',1),(2, 'Finance',2),(3, 'HR',3),(3, 'HR',4);
SELECT * FROM DEPARTMENT 151;

| | department_151.dept_id | department_151.dept_name | department_151.emp_id |
|---|------------------------|--------------------------|-----------------------|
| 1 | 1 | Management | 1 |
| 2 | 2 | Finance | 2 |
| 3 | 3 | HR | 3 |
| 4 | 3 | HR | 4 |

7. Display the cumulative details of each employee along with department details

SELECT * FROM EMPLOYEE_151 JOIN DEPARTMENT_151 ON
EMPLOYEE_151.DEPT_ID = DEPARTMENT_151.DEPT_ID;

SELECT * FROM EMPLOYEE_151 JOIN DEPARTMENT_151 ON EMPLOYEE_151.DEPT_ID = DEPARTMENT_151.DEPT_ID;

| employee_151.emp_id | employee_151.emp_name | employee_151.designation | employee_151.salary | employee_151.dept_id | department_151.dept_id | department_151.dept_name | department_151.emp_id |
|---------------------|-----------------------|--------------------------|---------------------|----------------------|------------------------|--------------------------|-----------------------|
| 1 | Nam | Manager | 10000000 | 1 | 1 | Management | 1 |
| 2 | Amy | Clerk | 50000 | 2 | 2 | Finance | 2 |
| 3 | Penny | Intern | 20000 | 3 | 3 | HR | 3 |
| | | | | | | | |
| 4 | Shelly | HR | 35000 | 3 | 3 | HR | 4 |