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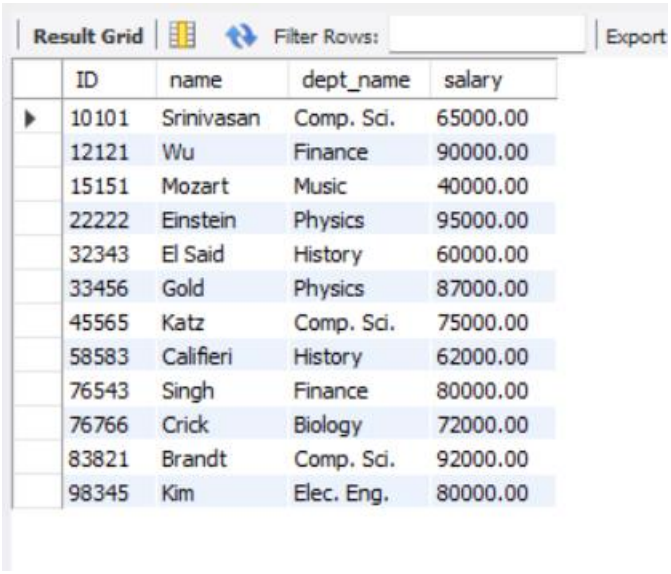
BRANCH :- Comps -B. **BATCH:** B.
EXPERIMENT 8: To create a different view of database.
SUBJECT :- DBMS (DATABASE MANAGEMENT SYSTEM)

- **Create and update view for university database and execute any 5 queries on views.**

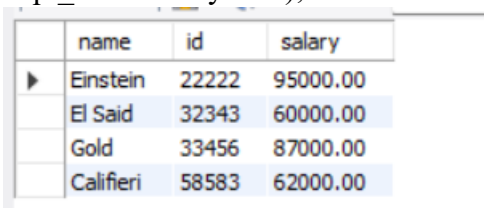
1. **View 1:**
   create view vinstructor as (select * from instructor where salary>30000);
   select * from vinstructor;



Result Grid | Filter Rows: | Export

ID	name	dept_name	salary
10101	Srinivasan	Comp. Sci.	65000.00
12121	Wu	Finance	90000.00
15151	Mozart	Music	40000.00
22222	Einstein	Physics	95000.00
32343	El Said	History	60000.00
33456	Gold	Physics	87000.00
45565	Katz	Comp. Sci.	75000.00
58583	Califieri	History	62000.00
76543	Singh	Finance	80000.00
76766	Crick	Biology	72000.00
83821	Brandt	Comp. Sci.	92000.00
98345	Kim	Elec. Eng.	80000.00

- **QUERY: Replace the view vinstructor and display name id and salary where dept_name is history or physics.**
  create or replace view vinstructor as
  (select name,id,salary from instructor where dept_name="History" or dept_name="Physics");



name	id	salary
Einstein	22222	95000.00
El Said	32343	60000.00
Gold	33456	87000.00
Califieri	58583	62000.00

- **QUERY : Update name in view instructor set it to manish where name is Gold.**
  update vinstructor set name="Manish"
  where name="Gold";

name	id	salary
Einstein	22222	95000.00
El Said	32343	60000.00
Manish	33456	87000.00
Califieri	58583	62000.00

2. **View 2:**
   Create view vclassroom as(select * from classroom);
   select * from vclassroom;

building	room_number	capacity
Packard	101	500
Painter	514	10
Taylor	3128	70
Watson	100	30
Watson	120	50

- **QUERY : Insert new values in vclassroom**
  insert into vclassroom(building,capacity,room_number) values ("Manish",100,305),("Jadhav",200,80);

building	room_number	capacity
Jadhav	80	200
Manish	305	100
Packard	101	500
Painter	514	10
Taylor	3128	70
Watson	100	30
Watson	120	50

3. **View 3:**
   create view vdept as (select * from department where budget>=90000);
   select * from vdept;

dept_name	building	budget
Biology	Watson	90000.00
Comp. Sci.	Taylor	100000.00
Finance	Painter	120000.00

- **QUERY: Delete from vdept where building name is Painter**
  Delete from vdept where building="Taylor";

	dept_name	building	budget
▶	Biology	Watson	90000.00
	Finance	Painter	120000.00

Advantages of SQL views:

1. Simplicity and Abstraction: Views simplify complex queries by abstracting underlying table structures.

2. Data Security: Views provide a layer of security by allowing users to access specific columns, rows, or aggregated data without direct table access.

3. Code Reusability: Views promote code reusability by encapsulating commonly used queries, reducing redundancy in SQL code.

4. Performance Optimization: Views can enhance performance by precomputing results or aggregations, saving computation time during query execution.

Disadvantages of SQL views:

1. Performance Overhead: Views may introduce performance overhead as they require additional processing to generate virtual result sets.

2. Complexity in Maintenance: Views can make database maintenance more complex, especially when dealing with nested or dependent views.

3. Limited Update Functionality: Updating data through views can be restricted, leading to potential challenges in certain scenarios.

4. Dependency Management: Changes in underlying table structures may impact views, necessitating careful management of dependencies to avoid errors.

Conclusion: Hence by completing this experiment I came to know about how to create a different view of database.