

## Creating View

- Use employees data from before -
  - **use demo\_01;**
- Check employees data -
  - **select \* from emp limit 1;**
- Create a view with only emp id and job details. -
  - **create view job\_view as select emp\_id, job from emp;**
- Can also create view with limited values from complex data types.
  - Creating a view with emp id and hire date and department id -
  - **create view job\_view\_2 as select emp\_id, job.hire\_date, job.dept\_no from emp;**
- Query views the same way we do normal tables in Hive -
  - **select \* from job\_view\_2 where year(hire\_date)>=2000;**
- Check the view description -
  - **describe formatted job\_view\_2;**
  - Notice here that this is a VIRTUAL VIEW
  - Notice the View information at the bottom telling us about its create statement and its base table.
- Useful use case of view is to simplify the use of complex queries.
  - For example we want to find all employees who have salary more than the average salary of all the employees. This query would require a subquery -
  - **set hive.auto.convert.join=false;**
  - **select \* from emp where job.salary > (select avg(job.salary) from emp);**
- Can simplify this query by first creating a view for the subquery. That will; make it easier to define any further queries on it-
  - **create view avg\_sal\_view as select \* from emp where job.salary > (select avg(job.salary) from emp);**
  - Now we can easily run queries on it.
  - Count the total such employees -

- **select count(\*) from avg\_sal\_view;**
- Count total such employees from Marketing department -
  - **select count(\*) from avg\_sal\_view where  
job.dept\_name='Marketing';**