**EXPERIMENT 1:**

**To Perform Various Commands in sql in oracle:**

•Find the name, street address, and cities of residence of all employees who work for FBC and earn more than $10,000.

select e.empname, e.street, e.city from Employee e join Works w on w.empname = e.empname where w.compname = 'FBC' and salary > 10000;



• Find all employees who live in the same cities.  
select city, count(empname) from Employee group by city;

Graphical user interface, text, application, table

Description automatically generated

•Find the company with the smallest pay roll

select min(count(empname)) from Works group by compname order by count(empname) asc;Graphical user interface, text, application, chat or text message

Description automatically generated

•Find the average salary for all employees.

select avg(salary) from Works;

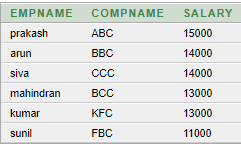


• Find the Employee who receives the lowest pay.  
select \* from Works where salary in (select min(salary) from Works);

Graphical user interface, text, application

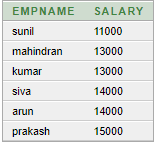
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•Find the Maximum salary of employee in particular company.



•Sort the employee names according to their salary.

select empname, salary from Works order by salary;



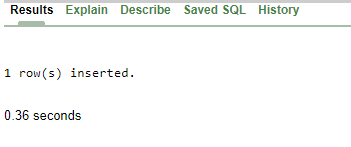
•Find the Employee name that who works under same manager.

select empname, managername from Manager;



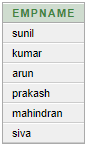
•Insert a new employee to a database, and update the table.

insert into Employee(empname, street, city) values ('suresh', 'west', 'bengal');



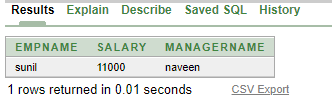
•Give the names of the employees living in the same city where their company is located.

select e.empname from Employee e join Works w on e.empname = w.empname join Company c on w.compname = c.compname and e.city = c.city;



•Give the name of manager and salary of employee SUNIL.

select m.empname, w.salary, m.managername from Manager m join Works w on w.empname = m.empname where m.empname = 'sunil';



**RESULT:**

**EXPERIMENT 2**

**Star Schema:**

create table time(time\_key varchar(45) primary key, day varchar(45), day\_of\_the\_week varchar(45),month varchar(45),quarter varchar(45),year varchar(45));

insert into time(time\_key, day, day\_of\_the\_week,month,year) values ('t1','12', 'monday', 'may','1997');

insert into time(time\_key, day, day\_of\_the\_week,month,year) values ('t2','11', 'sunday', 'june','1998');

select \* from time; create table branch\_1(branch\_key varchar(45) primary key, branch\_name varchar(45), branch\_type varchar(45));

insert into branch\_1(branch\_key, branch\_name, branch\_type) values ('b1','maduraieast', 'wholesale');

insert into branch\_1(branch\_key, branch\_name, branch\_type) values ('b2','maduraiwest', 'retail');

select \* from branch\_1;

drop table branch\_1;

create table item(item\_key varchar(45) primary key, item\_name varchar(45), brand varchar(45),type varchar(45),supplier\_type varchar(45));

insert into item(item\_key, item\_name, brand,type,supplier\_type ) values ('i1','bottle', 'sony', 'plastic','factory');

insert into item(item\_key,item\_name,brand,type,supplier\_type ) values ('i2','tv', 'samsung', 'electronic','dealer');

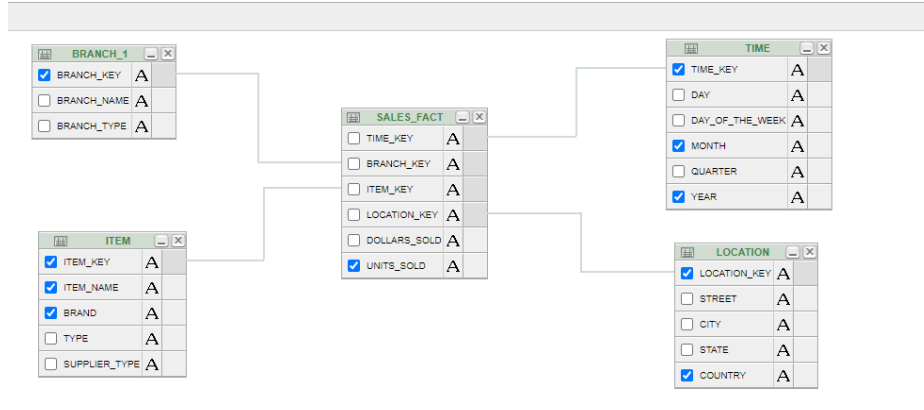
select \* from time; create table location(location\_key varchar(45) primary key, street varchar(45), city\_key varchar(45),state varchar(45),country varchar(45));

insert into location(location\_key, street, city,state,country) values ('l1','a\_street', 'madurai', 'tamilnadu','india');

insert into location(location\_key, street, city,state,country) values ('l2','b\_street', 'guntur', 'andra','india');

select \* from location; select \* from time;

create table sales\_fact(time\_key varchar(45), branch\_key varchar(45) , item\_key varchar(45),location\_key varchar(45));



**Snowflake Schema:**

create table time(time\_key varchar(45) primary key, day varchar(45), day\_of\_the\_week

varchar(45),month varchar(45),quarter varchar(45),year varchar(45));

insert into time(time\_key, day, day\_of\_the\_week,month,year) values ('t1','12', 'monday',

'may','1997');

insert into time(time\_key, day, day\_of\_the\_week,month,year) values ('t2','11', 'sunday',

'june','1998');

select \* from time;

create table branch\_1(branch\_key varchar(45) primary key, branch\_name varchar(45),

branch\_type varchar(45));

insert into branch\_1(branch\_key, branch\_name, branch\_type) values ('b1','maduraieast','wholesale');

insert into branch\_1(branch\_key, branch\_name, branch\_type) values ('b2','maduraiwest','retail');

select \* from branch\_1;

drop table branch\_1;

reate table supplier(supplier\_key varchar(45) primary key, supplier\_type varchar(45));

insert into supplier(supplier\_key,supplier\_type)values("s1","wholesale");

insert into supplier(supplier\_key,supplier\_type)values("s2","retail");

select \* from supplier;

drop table supplier;

create table city(city\_key varchar(45) primary key, city varchar(45), province\_or\_state

varchar(45),country varchar(45));

insert into city(city\_key,city,province\_or\_state,country)values("c1","madurai","tamilnadu","india");

insert into city(city\_key,city,province\_or\_state,country)values("c2","washington","colombia","usa");

create table shipping\_fact(item\_key varchar(45) , time\_key varchar(45), shipper\_key

varchar(45),from\_location varchar(45),to\_location varchar(45),dollers\_cost

varchar(45),units\_shipped varchar(45));

create table shipper(shipper\_key varchar(45), shipper\_name varchar(45), location\_key

varchar(45),shipper\_type varchar(45));

insert into shipper(shipper\_key,shipper\_name,location\_key,shipper\_type)values("s1","sony","l1","wholesale");

insert into shipper(shipper\_key,shipper\_name,location\_key,shipper\_type)values("s2","samsung","l2","retail");

create table location1(location\_key varchar(45) primary key, street varchar(45), city\_key

varchar(45));

insert into location1(location\_key,street,city\_key)values("l1","a\_street","madurai");

insert into location1(location\_key,street,city\_key)values("l2","b\_street","washington");

create table sales\_fact(time\_key varchar(45), branch\_key varchar(45) , item\_key

varchar(45),location\_key varchar(45),doller\_sold varchar(45),unit\_sold varchar(45));

insert into

sales\_fact(time\_key,branch\_key,item\_key,location\_key,doller\_sold,unit\_sold)values("t1","b1","i1","l1","120","7");

insert into sales\_fact(time\_key,branch\_key,item\_key,location\_key,doller\_sold,unit\_sold)values("t2","b2","i2","l2","240","9");

create table item\_1(item\_key varchar(45) primary key, item\_name varchar(45), brand

varchar(45),type varchar(45),supplier\_key varchar(45));

insert into item\_1(item\_key,item\_name,brand,type,supplier\_key)values("i1","tv","sony","led","s1");

insert into item\_1(item\_key,item\_name,brand,type,supplier\_key)values("i2","washingmachine","lg","wash+drying","s2");

create table location(location\_key varchar(45) primary key, street varchar(45), city\_key

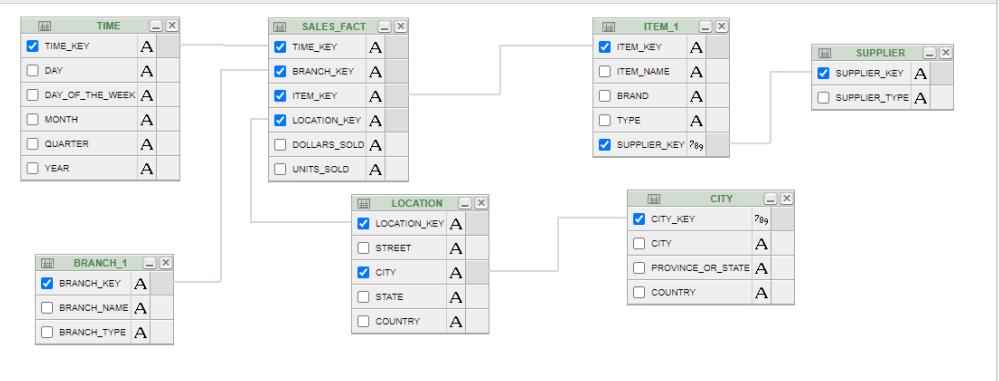
varchar(45),state varchar(45),country varchar(45));

insert into location(location\_key, street, city,state,country) values ('l1','a\_street', 'madurai','tamilnadu','india');

insert into location(location\_key, street, city,state,country) values ('l2','b\_street', 'guntur',

'andra','india');

select \* from location;



**Fact constellation schema:**

create table timef(time\_key number primary key, day number, day\_of\_week varchar(20), month,number, quarter number, year number)

create table branchf(branch\_key number primary key,branch\_name varchar(20),branch\_type varchar(20))

create table itemf(item\_key number primary key, item\_name varchar(20), brand varchar(20),type varchar(20),supplier\_type varchar(20))

create table locationf(location\_key number primary key, street varchar(20),city varchar(20),province\_or\_state varchar(20),country varchar(20))

create table sales\_factf(time\_key number, FOREIGN KEY(time\_key) REFERENCES

timef(time\_key), branch\_key number, FOREIGN KEY(branch\_key)REFERENCES

branchf(branch\_key), item\_key number, FOREIGN KEY(item\_key)REFERENCES itemf(item\_key),location\_key number, FOREIGN KEY(location\_key) REFERENCES locationf(location\_key),units\_sold number, dollar\_sold number);

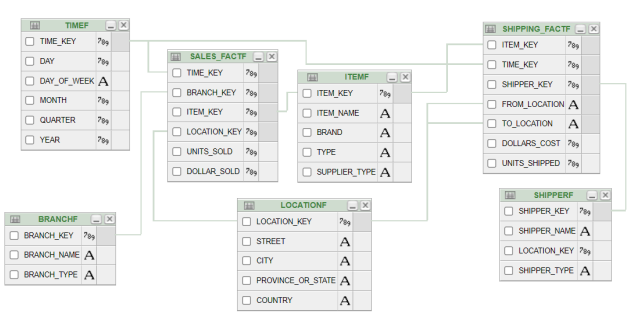
create table shipping\_factf(item\_key number, FOREIGN KEY(item\_key) REFERENCES

itemf(item\_key), time\_key number, FOREIGN KEY(time\_key) REFERENCES

timef(time\_key),shipper\_key number , FOREIGN KEY(shipper\_key) REFERENCES

shipperf(shipper\_key), from\_location varchar(20), to\_location varchar(20), dollars\_cost number,units\_shipped number)

create table shipperf(shipper\_key number primary key, shipper\_name varchar(20), location\_key number, FOREIGN KEY(location\_key) REFERENCES locationf(location\_key),shipper\_type varchar(20))



**RESULT:**

**Experiment-3**

**Table Creation:**

create table employee\_details(id integer primary key, name varchar2(20), job varchar2(20), salary number(10));

insert into employee\_details values(7369, 'kumar','clerk', 20000);

insert into employee\_details values(7566, ' ram', 'manager ' ,40000);

insert into employee\_details values(7654, ' surya', 'salesman ' ,25000);

insert into employee\_details values(7499, ' ajay', 'salesman' ,30000);

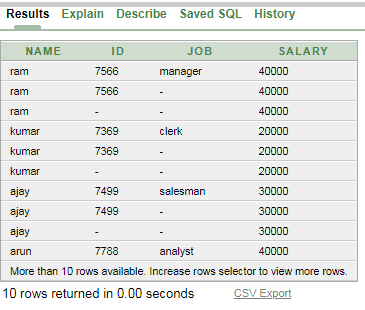
insert into employee\_details values(7521, ' prakash', 'salesman' ,35000);

insert into employee\_details values(7788, ' arun', 'analyst' ,40000);

insert into employee\_details values(7839, ' siva', 'president' ,80000);

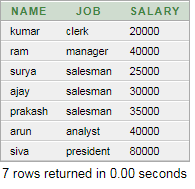
**ROLL-UP:**

select name, id , job, sum(salary) as salary from employee\_details group by rollup(name, id , job);



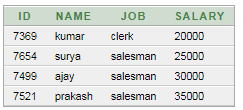
**DRILL-DOWN:**

select name, job, salary from employee\_details;



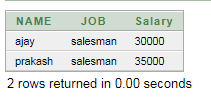
**SLICE:**

select \*from employee\_details where salary<40000;



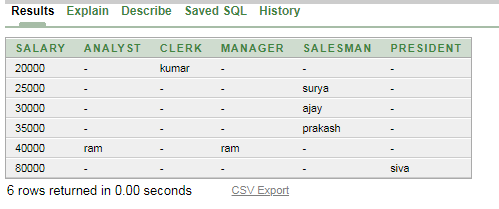
**DICE:**

select name, job , sum(salary) as "salary" from Employee\_details where (salary > 20000 and job = 'salesman') group by name , job order by name asc;



**PIVOT:**

select salary, max(decode(salary,'40000',name))ANALYST, max(decode(salary,'20000',name))CLERK,max(decode(salary,'40000',name))MANAGER ,max(decode(salary,'25000',name,'30000',name,'35000',name))Salesman, max(decode(salary,'80000',name))President from (select job,salary,name from Employee\_details) group by salary order by salary;



**RESULT:**