**DATA WAREHOUSING AND DATA MINING LAB**

NAME: BALAJI J

REG. NO: 20Y005

**Experiment-1**

**Aim:**

To perform various commands in PL/SQL .

**Tools:** Oracle 10g

**Procedure:**

1) Open SQL 8.0 tool and it will display the login window.

2) Enter the username = ‘SCOTT’ and password = ‘TIGER’

3) After the successfully login try to write down the SQL queries in correct syntax and run them successfully.

**Output:**

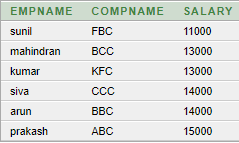
•Find the name, street address, and cities of residence of all employees who work for FBC and earn more than $10,000.

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 the company with the smallest pay roll

select empname, compname, salary from Works order by salary;



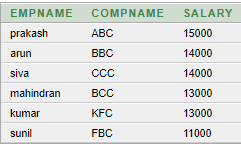
•Find the average salary for all employees.

select avg(salary) from Works;



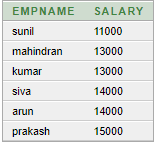
•Find the Maximum salary of employee in particular company.

select empname, compname, salary from Works order by salary desc;



•Sort the employee names according to their salary.

select empname, salary from Works order by salary;



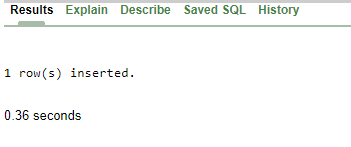
•Find the Employee name that who works under same manager.

select empname, managername from Manager;



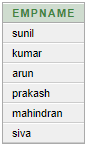
•Insert a new employee to a database, and update the table.

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



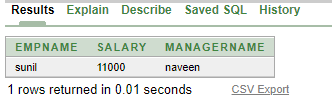
•Give the names of the employees living in the same city where their company is located.

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:**

The given SQL commands were successfully executed.

**Experiment-3**

**Aim:**

To perform various OLAP operations such slice, dice, roll up, drill up, pivot.

**Tools:** Oracle 10g

**Procedure:**

1) Open SQL tool and login successfully.

2) Write down the queries to perform slice. In which one should keep one of the

dimensions as constant and other dimensions should range from min to max.

3) Write down the queries to perform the dice. In which one has to keep two of the

dimensions constant.

4) Write down the queries to perform roll-up by keeping one dimension constant and others should range from min to max. It is more like a generalization.

5) Write down the queries to perform roll-up by keeping one dimension constant and others should range from min to max. It is more like a specialization.

**Output:**

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

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

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

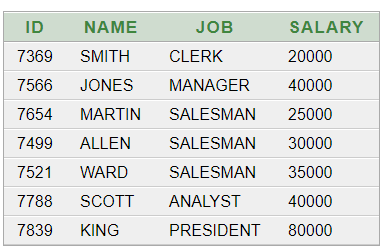
insert into employee\_details values(7654, ' martin', ‘salesman ' ,25000);

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

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

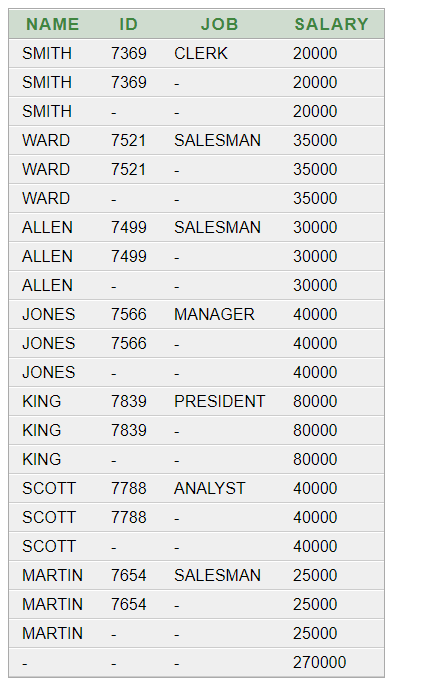
insert into employee\_details values(7788, ' scott', ‘analyst' ,40000);

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



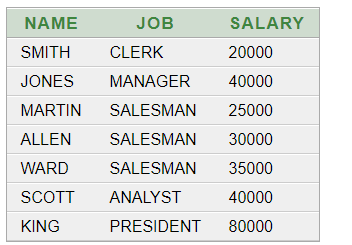
**Roll-up:**

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



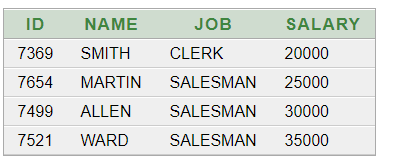
**Drill-up:**

select name, job, salary from employee\_details;



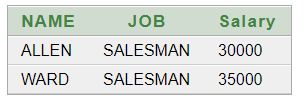
**Slice:**

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



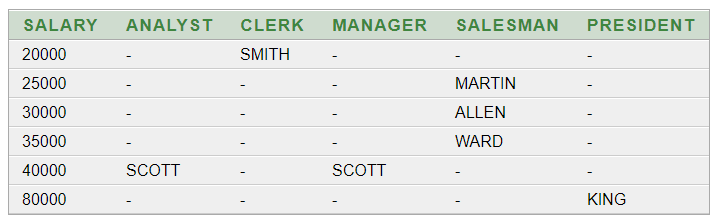
**Dice:**

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:**

The given OLAP operations were successfully executed in Oracle.