1. **Create a database called COMPANY consisting of two tables - EMP & DEPT**

EMP

Column name	Data type	Description
EMPNO	Number	Employee number
ENAME	Varchar	Employee name
JOB	Char	Designation
MGR	Number	Manager's Emp. number
HIREDATE	Date	Date of joining
SAL	Number	Basic Salary
COMM	Number	Commission
DEPTNO	Number	Department Number

DEPT

Column name	Data type	Description
DEPTNO	Number	Department number
DNAME	Varchar	Department name
LOC	Varchar	Location of department

Data for EMP

7369	Smith	Clerk	7902	17/12/80	800		20
7499	Allen	Salesman	7698	20/2/81	1600	300	30
7521	Ward	Salesman	7698	22/2/81	1250	500	30
7566	Jones	Manager	7839	2/4/81	2975		20
7654	Martin	Salesman	7698	28/9/81	1250	1400	30
7698	Blake	Manager	7839	1/5/81	2850		30
7782	Clark	Manager	7839	9/6/81	2450		10
7788	Scott	Analyst	7566	9/12/82	3000		20
7839	King	President		17/11/81	5000		10
7844	Turner	Salesman	7698	8/9/81	1500	0	30
7876	Adams	Clerk	7788	12/1/83	1100		20
7900	James	Clerk	7698	3/12/81	950		30
7902	Ford	Analyst	7566	4/12/81	3000		20
7934	Miller	Clerk	7782	23/1/82	1300		10

Data for DEPT table

10	Accounting	New York
20	Research	Dallas
30	Sales	Chicago
40	Operations	Boston

Perform the following queries on the tables just created :

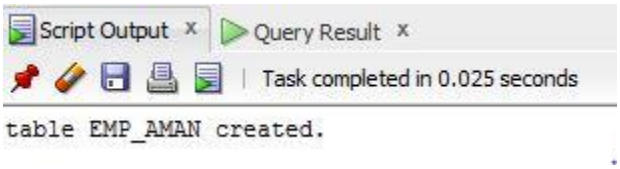
1. List the names of analysts and salesmen.
2. List details of employees who have joined before 30 Sep 81.
3. List names of employees who are not managers.
4. List the names of employees whose employee numbers are 7369, 7521, 7839, 7934, 7788.
5. List employees not belonging to department 30, 40, or 10.
6. List employee names for those who have joined between 30 June and 31 Dec. '81.
7. List the different designations in the company.
8. List the names of employees who are not eligible for commission.
9. List the name and designation of the employee who does not report to anybody.
10. List the employees not assigned to any department.
11. List the employees who are eligible for commission.
12. List employees hose names either start or end with "S".
13. List names of employees whose names have "i" as the second character.
14. List the number of employees working with the company.
15. List the number of designations available in the EMP table.
16. List the total salaries paid to the employees.
17. List the maximum, minimum and average salary in the company.
18. List the maximum salary paid to a salesman.

ANSWER

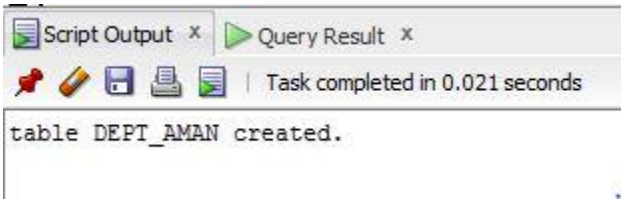
Table Creation :

```
create table emp_aman
(
   empno int not null,
   ename varchar(15) not null,
   job char(10) not null,
```

```
    mgr int,
    hiredate date not null,
    sal int not null,
    comm int,
    deptno int not null,
    primary key(empno)
)
```




```
create table dept_aman
(
    deptno int not null,
    dname varchar(15)not null,
    loc varchar(15),
    primary key(deptno)
)
```




```
insert into emp_aman values
(7369,'Smith','Clerk',7902,'1980-12-17',800,null,20),
(7499,'Allen','Salesman',7698,'1981-2-20',1600,300,30),
(7521,'Ward','Salesman',7698,'1981-2-22',1250,500,30),
(7566,'Jones','Manager',7839,'1981-4-2',2975,null,20),
```

(7654,'Martin','Salesman',7698,'1981-9-28',1250,1400,30),

(7698,'Blake','Manager',7839,'1981-5-1',2850,null,30),

(7782,'Clark','Manager',7839,'1981-6-9',2450,null,10),

(7788,'Scott','Analyst',7566,'1982-12-9',3000,null,20),

(7839,'King','President',null,'1981-11-17',5000,null,10),

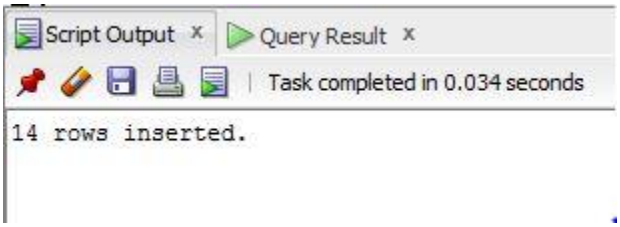
(7844,'Turner','Salesman',7698,'1981-9-8',1500,0,30),

(7876,'Adams','Clerk',7788,'1983-1-12',1100,null,20),

(7900,'James','Clerk',7698,'1981-12-3',950,null,30),

(7902,'Ford','Analyst',7566,'1981-12-4',3000,null,20),

(7934,'Miller','Clerk',7782,'1982-1-23',1300,null,10)



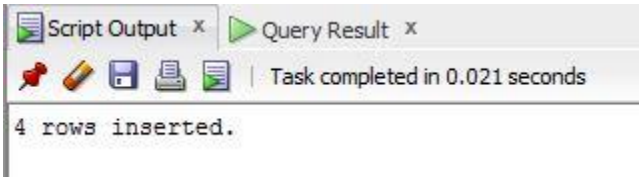
insert into dept_aman values

(10,'Accounting','New York'),

(20,'Research','Dallas'),

(30,'Sales','Chicago'),

(40,'Operations','Boston')



Select *from emp_aman

Script Output | Query Result

SQL | All Rows Fetched: 14 in 0.004 seconds

	empno	ename	job	mgr	hiredate	sal	comm	deptno
1	7369	Smith	Clerk	7902	1980-12-17	800	(null)	20
2	7499	Allen	Salesman	7698	1981-02-20	1600	300	30
3	7521	Ward	Salesman	7698	1981-02-22	1250	500	30
4	7566	Jones	Manager	7839	1981-04-02	2975	(null)	20
5	7654	Martin	Salesman	7698	1981-09-28	1250	1400	30
6	7698	Blake	Manager	7839	1981-05-01	2850	(null)	30
7	7782	Clark	Manager	7839	1981-06-09	2450	(null)	10
8	7788	Scott	Analyst	7566	1982-12-09	3000	(null)	20
9	7839	King	President	(null)	1981-11-17	5000	(null)	10
10	7844	Turner	Salesman	7698	1981-09-08	1500	0	30
11	7876	Adams	Clerk	7788	1983-01-12	1100	(null)	20
12	7900	James	Clerk	7698	1981-12-03	950	(null)	30
13	7902	Ford	Analyst	7566	1981-12-04	3000	(null)	20
14	7934	Miller	Clerk	7782	1982-01-23	1300	(null)	10

Select *from dept_aman

Script Output | Query Result

SQL | All Rows Fetched: 4 in 0.003 seconds

	deptno	dname	loc
1	10	Accounting	New York
2	20	Research	Dallas
3	30	Sales	Chicago
4	40	Operations	Boston

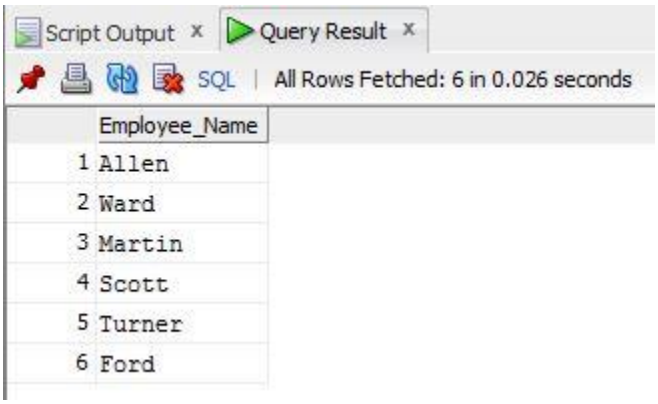
Queries:

1. **List the name of analyst and salesman.**

   select ename as Employee_Name

   from emp_aman

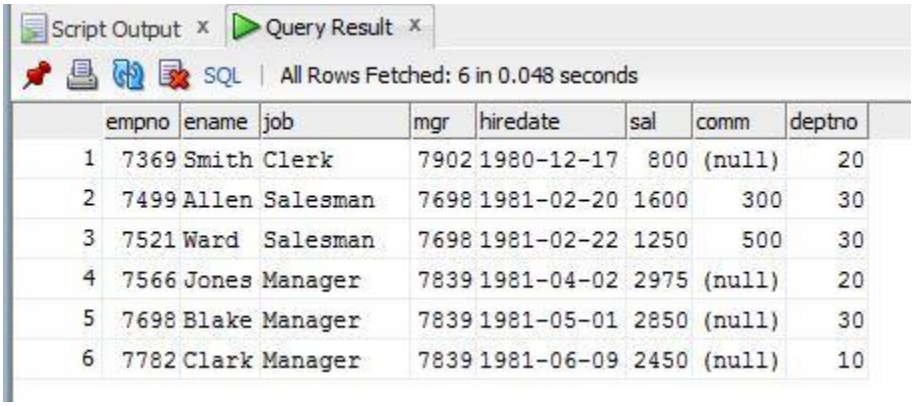
   where job in('analyst','salesman')



	Employee_Name
1	Allen
2	Ward
3	Martin
4	Scott
5	Turner
6	Ford

2. **List details of employee who has joined before 30 Sep, 81.**

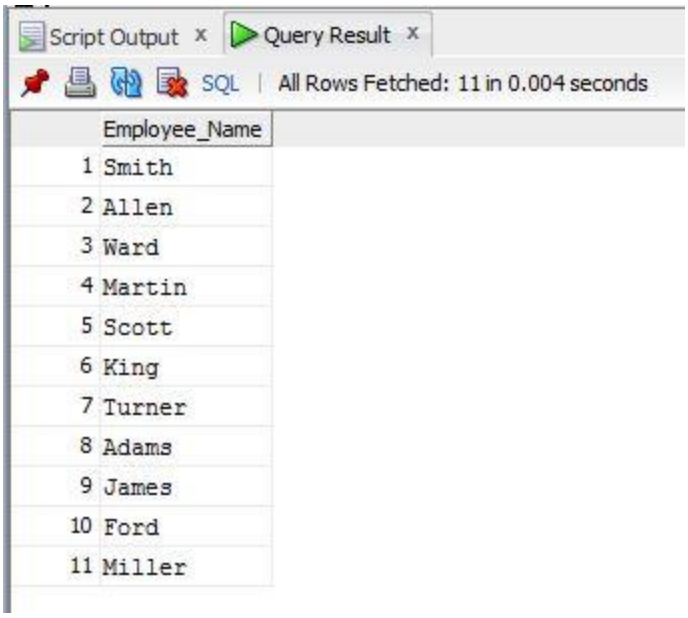
```
select empno,ename,job,mgr,hiredate,sal,comm,deptno
from emp_aman
where hiredate< '1981-7-30'
```



	empno	ename	job	mgr	hiredate	sal	comm	deptno
1	7369	Smith	Clerk	7902	1980-12-17	800	(null)	20
2	7499	Allen	Salesman	7698	1981-02-20	1600	300	30
3	7521	Ward	Salesman	7698	1981-02-22	1250	500	30
4	7566	Jones	Manager	7839	1981-04-02	2975	(null)	20
5	7698	Blake	Manager	7839	1981-05-01	2850	(null)	30
6	7782	Clark	Manager	7839	1981-06-09	2450	(null)	10

3. **List names of employees who are not managers.**

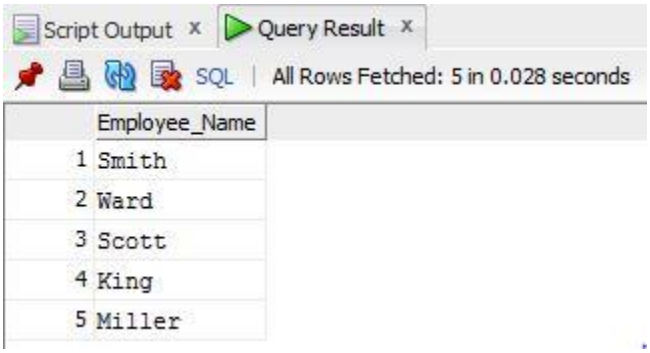
```
select ename as Employee_Name
from emp_aman
where job!='manager'
```



	Employee_Name
1	Smith
2	Allen
3	Ward
4	Martin
5	Scott
6	King
7	Turner
8	Adams
9	James
10	Ford
11	Miller

4. **List the names of employees whose employee numbers are 7369, 7521, 7839, 7934, 7788.**

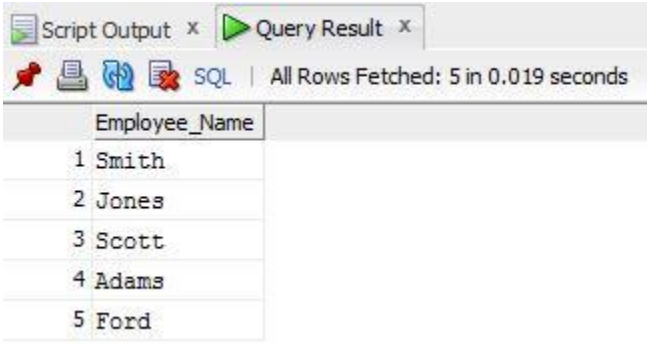
```
select ename as Employee_Name
from emp_aman
where empno in(7369,7521,7839,7934,7788)
```



	Employee_Name
1	Smith
2	Ward
3	Scott
4	King
5	Miller

5. **List employees not belonging to department 30, 40 or 10.**

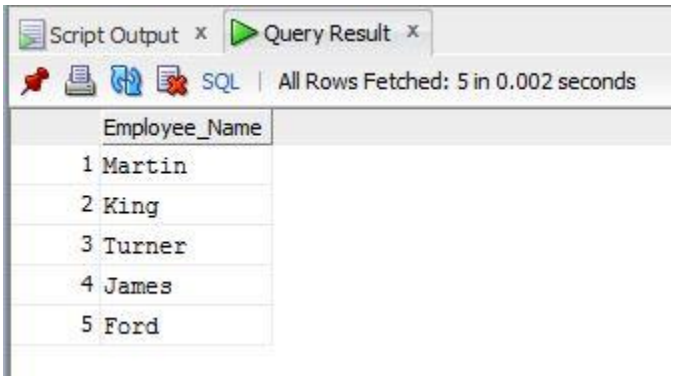
```
select ename as Employee_Name
from emp_aman
where deptno not in(30,40,10)
```



	Employee_Name
1	Smith
2	Jones
3	Scott
4	Adams
5	Ford

6. **List employees name for those who have joined between 30 June and 31 Dec 81.**

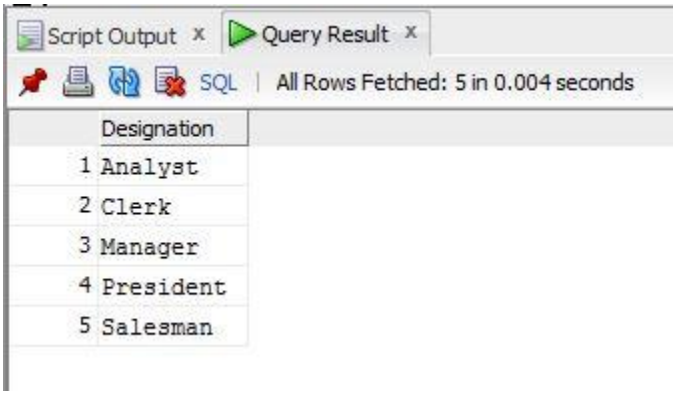
```
select ename as Employee_Name
from emp_aman
where hiredate between '1981-6-30' and '1981-12-31'
```



	Employee_Name
1	Martin
2	King
3	Turner
4	James
5	Ford

7. **List the different designations in the company.**

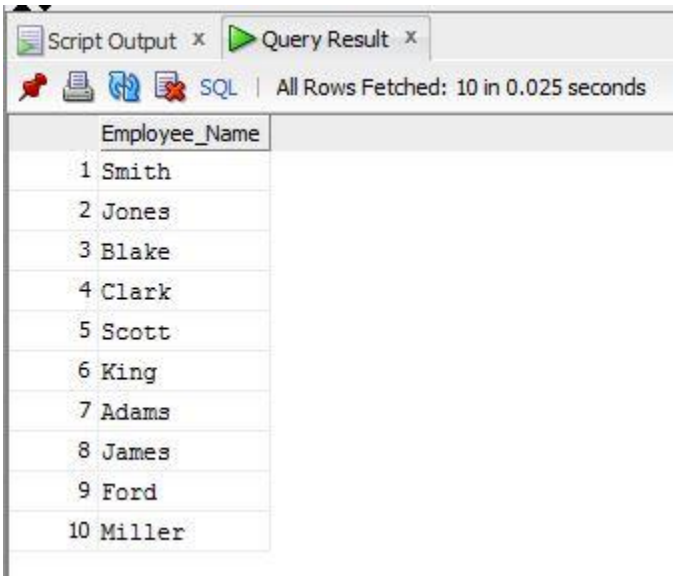
```
select distinct job as Designation
from emp_aman
```



	Designation
1	Analyst
2	Clerk
3	Manager
4	President
5	Salesman

8. **List the names of employees who are not eligible for commission.**

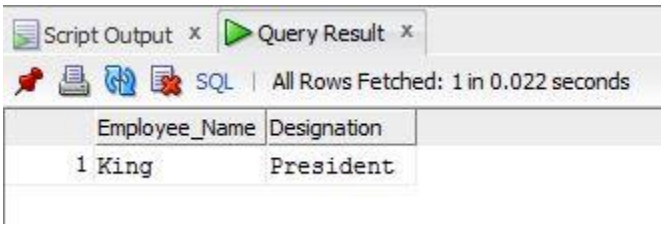
```
select ename as Employee_Name
from emp_aman
where comm is null
```



	Employee_Name
1	Smith
2	Jones
3	Blake
4	Clark
5	Scott
6	King
7	Adams
8	James
9	Ford
10	Miller

9. **List the name and designation of the employee who does not report to anybody.**

```
select ename as Employee_Name, job as Designation
from emp_aman
where mgr is null
```

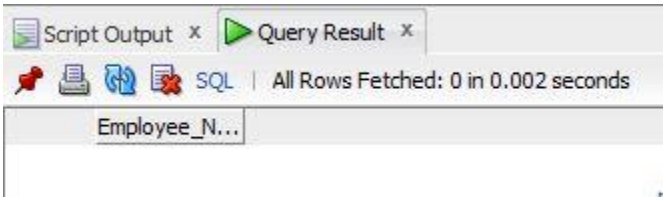


	Employee_Name	Designation
1	King	President

10. **List the employees not assigned to any department.**

```
select ename as Employee_Name
from emp_aman
```

where deptno is null

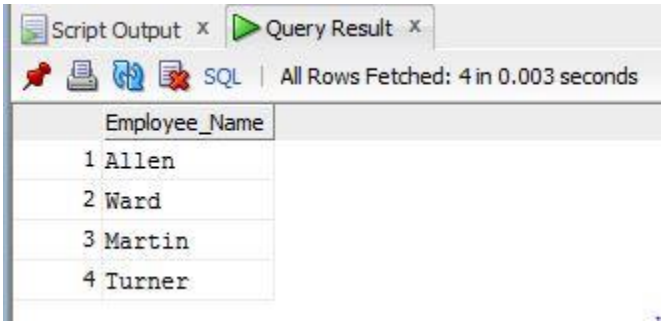


11. List the employees who are eligible for commission.

select ename as Employee_Name

from emp_aman

where comm is not null

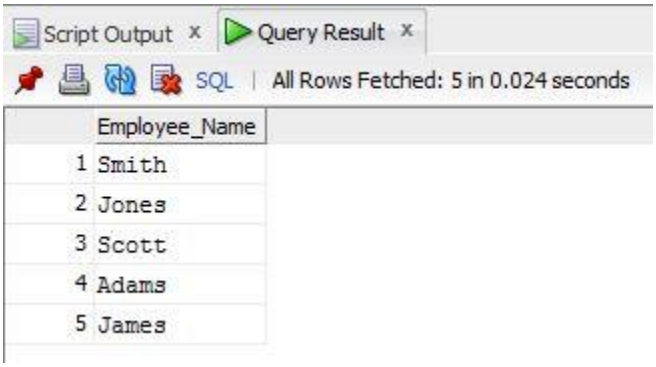


12. List the employees whose name either start or end with 's'.

select ename as Employee_Name

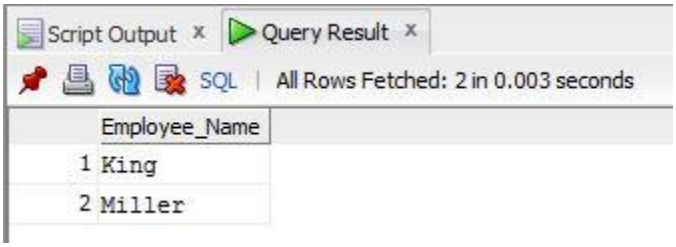
from emp_aman

where ename like '%s%'



13. List names of employee whose name have 'i' as the second character.

```
select ename as Employee_Name
from emp_aman
where ename like '_i%'
```

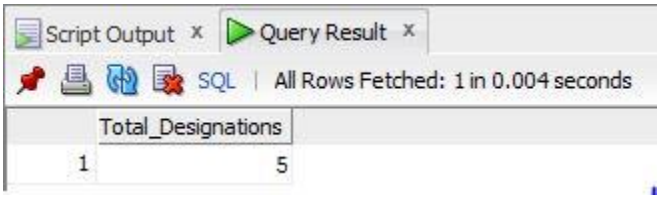


14. List number of employees working with the company.

```
select count(ename) as Total_Employees
from emp_aman
```

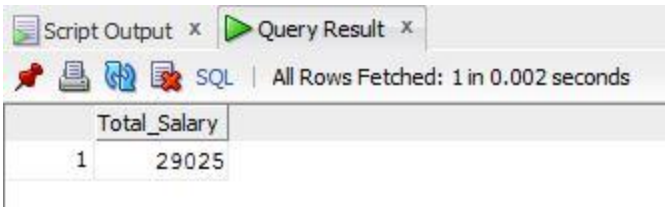
15. List the number of designations available in the emp table.

```
select count(distinct job) as Total_Designations
from emp_aman
```



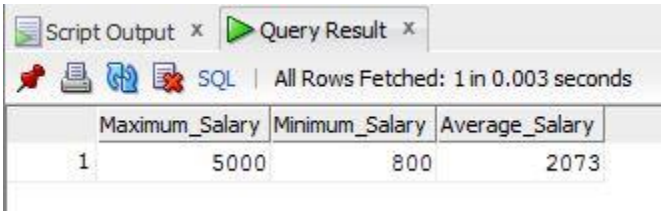
16. List the total salaries paid to the employees.

```
select sum(sal) as Total_Salary
from emp_aman
```



17. List the maximum, minimum and average salary in the company.

```
select max(sal) as Maximum_Salary, min(sal) as Minimum_Salary, avg(sal) as
Average_Salary
from emp_aman
```



18. List the maximum salary paid to a salesman.

```
select max(sal) as maximum_salary
from emp_aman
where job='salesman'
```