

Module –3 (RDBMS & Database Programming With JDBC)

I :- Select unique job from EMP table.

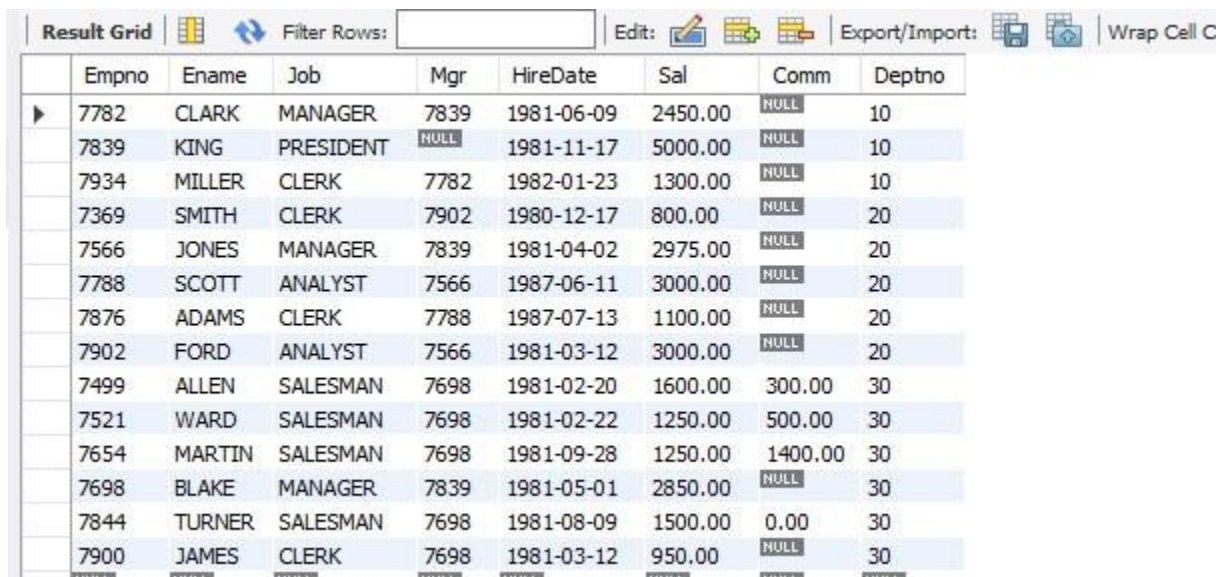
→ SELECT DISTINCT job FROM EMP;



job
CLERK
SALESMAN
MANAGER
ANALYST
PRESIDENT

li :- List the details of the emps in asc order of the Deptnos and desc of Jobs?

→ SELECT * FROM EMP ORDER BY Deptno ASC;












Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno
7782	CLARK	MANAGER	7839	1981-06-09	2450.00	NULL	10
7839	KING	PRESIDENT	NULL	1981-11-17	5000.00	NULL	10
7934	MILLER	CLERK	7782	1982-01-23	1300.00	NULL	10
7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
7566	JONES	MANAGER	7839	1981-04-02	2975.00	NULL	20
7788	SCOTT	ANALYST	7566	1987-06-11	3000.00	NULL	20
7876	ADAMS	CLERK	7788	1987-07-13	1100.00	NULL	20
7902	FORD	ANALYST	7566	1981-03-12	3000.00	NULL	20
7499	ALLEN	SALESMAN	7698	1981-02-20	1600.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1250.00	500.00	30
7654	MARTIN	SALESMAN	7698	1981-09-28	1250.00	1400.00	30
7698	BLAKE	MANAGER	7839	1981-05-01	2850.00	NULL	30
7844	TURNER	SALESMAN	7698	1981-08-09	1500.00	0.00	30
7900	JAMES	CLERK	7698	1981-03-12	950.00	NULL	30

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→SELECT DISTINCT job FROM EMP ORDER BY Job DESC;
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iv:- List the emps who joined before 1981.

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→SELECT * FROM EMP WHERE YEAR(HireDate) < 1981;
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Result Grid			Filter Rows:	<input type="text"/>	Edit:				Export/Import:			Wr
	Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno				
	7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20				
	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL				




v. List the Empno, Ename, Sal, Daily sal of all emps in the asc order of Annsal.

→SELECT Empno, Ename, Sal, Sal/30 AS Daily_Salary FROM EMP ORDER BY Daily_Salary;

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Empno	Ename	Sal	Daily_Salary
7369	SMITH	800.00	26.666667
7900	JAMES	950.00	31.666667
7876	ADAMS	1100.00	36.666667
7521	WARD	1250.00	41.666667
7654	MARTIN	1250.00	41.666667
7934	MILLER	1300.00	43.333333
7844	TURNER	1500.00	50.000000
7499	ALLEN	1600.00	53.333333
7782	CLARK	2450.00	81.666667
7698	BLAKE	2850.00	95.000000
7566	JONES	2975.00	99.166667
7788	SCOTT	3000.00	100.000000
7902	FORD	3000.00	100.000000
7839	KING	5000.00	166.666667

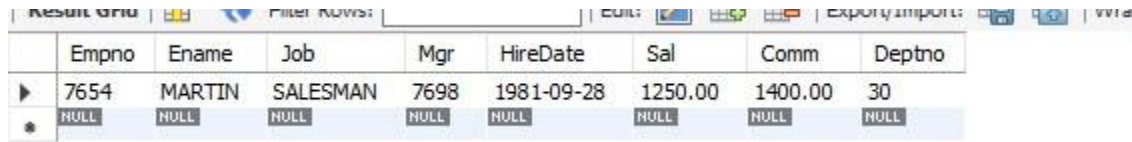
vi. List the Empno, Ename, Sal, Exp of all emps working for Mgr 7566.

→SELECT Empno, Ename, Sal, HireDate , YEAR(CURDATE()) - YEAR(HireDate) AS EXP FROM EMP;

Result Grid		 	Filter Rows:			Export:		Wrap Cell Conte
	Empno	Ename	Sal	HireDate	EXP			
▶	7369	SMITH	800.00	1980-12-17	44			
	7499	ALLEN	1600.00	1981-02-20	43			
	7521	WARD	1250.00	1981-02-22	43			
	7566	JONES	2975.00	1981-04-02	43			
	7654	MARTIN	1250.00	1981-09-28	43			
	7698	BLAKE	2850.00	1981-05-01	43			
	7782	CLARK	2450.00	1981-06-09	43			
	7788	SCOTT	3000.00	1987-06-11	37			
	7839	KING	5000.00	1981-11-17	43			
	7844	TURNER	1500.00	1981-08-09	43			
	7876	ADAMS	1100.00	1987-07-13	37			
	7900	JAMES	950.00	1981-03-12	43			
	7902	FORD	3000.00	1981-03-12	43			
	7934	MILLER	1300.00	1982-01-23	42			

vii. Display all the details of the emps who's Comm. Is more than their Sal?

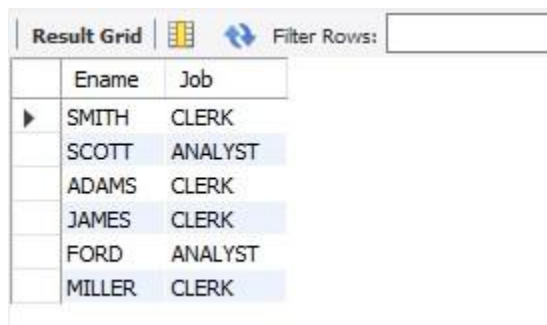
→SELECT * FROM EMP WHERE Comm > Sal;



	Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno
▶	7654	MARTIN	SALESMAN	7698	1981-09-28	1250.00	1400.00	30
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

viii. List the emps who are either 'CLERK' or 'ANALYST' in the Desc order.

→SELECT Ename, Job FROM EMP WHERE Job = "CLERK" OR Job = "ANALYST";



	Ename	Job
▶	SMITH	CLERK
	SCOTT	ANALYST
	ADAMS	CLERK
	JAMES	CLERK
	FORD	ANALYST
	MILLER	CLERK

ix. List the emps Who Annual sal ranging from 22000 and 45000.

→SELECT Ename, Sal, Sal * 12 AS Annual_Salary FROM EMP WHERE (Sal * 12) BETWEEN 22000 AND 45000;




	Ename	Sal	Annual_Salary
▶	JONES	2975.00	35700.00
	BLAKE	2850.00	34200.00
	CLARK	2450.00	29400.00
	SCOTT	3000.00	36000.00
	FORD	3000.00	36000.00


```
SELECT E1.Ename, E1.HireDate, E2.Ename AS MgrName, E2.HireDate AS
MgrHireDate

FROM EMP E1

JOIN EMP E2 ON E1.Mgr = E2.Empno

WHERE E1.HireDate < E2.HireDate;
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

Result Grid				Filter Rows:	Export
	Ename	HireDate	MgrName	MgrHireDate	
▶	SMITH	1980-12-17	FORD	1981-03-12	
	ALLEN	1981-02-20	BLAKE	1981-05-01	
	WARD	1981-02-22	BLAKE	1981-05-01	
	JONES	1981-04-02	KING	1981-11-17	
	BLAKE	1981-05-01	KING	1981-11-17	
	CLARK	1981-06-09	KING	1981-11-17	
	JAMES	1981-03-12	BLAKE	1981-05-01	
	FORD	1981-03-12	JONES	1981-04-02	

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→SELECT * FROM EMP E1 WHERE E1.DEPTNO = 20 AND E1.JOB IN ( SELECT
E2.JOB FROM EMP E2 WHERE E2.DEPTNO = 10 );
```

[illegible]

xv. List the Emps who's Sal is same as FORD or SMITH in desc order of Sal.

→select * from emp where sal IN(select sal from emp where Ename="SMITH" OR Ename="FORD");

Result Grid				Filter Rows:		Edit:				Export/Import:	
	Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno			
	7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20			
	7788	SCOTT	ANALYST	7566	1987-06-11	3000.00	NULL	20			
	7902	FORD	ANALYST	7566	1981-03-12	3000.00	NULL	20			
	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL			

xvi. List the emps whose jobs same as SMITH or ALLEN.

→select * from emp where job In(select job from emp where ename="Smith" or ename="Allen");

Result Grid		Filter Rows	Edit	Export/Import	Wrap Cell Contents			
	Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno
▶	7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
	7499	ALLEN	SALESMAN	7698	1981-02-20	1600.00	300.00	30
	7521	WARD	SALESMAN	7698	1981-02-22	1250.00	500.00	30
	7654	MARTIN	SALESMAN	7698	1981-09-28	1250.00	1400.00	30
	7844	TURNER	SALESMAN	7698	1981-08-09	1500.00	0.00	30
	7876	ADAMS	CLERK	7788	1987-07-13	1100.00	NULL	20
	7900	JAMES	CLERK	7698	1981-03-12	950.00	NULL	30
	7934	MILLER	CLERK	7782	1982-01-23	1300.00	NULL	10
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

xvii. Any jobs of deptno 10 those that are not found in deptno 20.

→select job from emp where deptno= 10 and job not in(select job from emp where deptno=20);

Result Grid	
	job
▶	PRESIDENT

xviii. Find the highest sal of EMP table.

→select max(sal) as Highestsal from emp;

Result Grid	
	Highestsal
▶	5000.00

xix. Find details of highest paid employee.

→select * from emp where sal = (select max(sal) as Highestsal from emp);

Result Grid

Filter Rows:

Edit:

Export/Import:

	Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno
▶	7839	KING	PRESIDENT	NULL	1981-11-17	5000.00	NULL	10
★	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

xx. Find the total sal given to the MGR.

→select job,sum(sal) as totalsum from emp group by job having job="Manager";

Result Grid		Filter Rows:
	job	totalsum
▶	MANAGER	8275.00

xxi. List the emps whose names contains 'A'.

→select * from emp where ename like 'A%';

Result Grid								
Filter Rows:								
Edit:								
Export/Import:								
Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno	
7499	ALLEN	SALESMAN	SALESMAN	31-02-20	1600.00	300.00	30	
7876	ADAMS	CLERK	7788	1987-07-13	1100.00	NULL	20	
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	

xxii. Find all the emps who earn the minimum Salary for each job wise in ascending order.

→SELECT e1.ename, e1.sal ,e1.job

FROM emp e1

JOIN (

SELECT job, MIN(sal) AS minsalary

FROM emp

GROUP BY job

) e2 ON e1.job = e2.job AND e1.sal = e2.minsalary order by sal;

Result Grid			
	ename	sal	job
▶	SMITH	800.00	CLERK
	WARD	1250.00	SALESMAN
	MARTIN	1250.00	SALESMAN
	CLARK	2450.00	MANAGER
	SCOTT	3000.00	ANALYST
	FORD	3000.00	ANALYST
	KING	5000.00	PRESIDENT

xxiii. List the emps whose sal greater than Blake's sal.

→select *from emp where sal > (select sal from emp where ename="Blake");

Result Grid								
	Empno	Ename	Job	Mgr	HireDate	Sal	Comm	Deptno
▶	7566	JONES	MANAGER	7839	1981-04-02	2975.00	NULL	20
	7788	SCOTT	ANALYST	7566	1987-06-11	3000.00	NULL	20
	7839	KING	PRESIDENT	NULL	1981-11-17	5000.00	NULL	10
	7902	FORD	ANALYST	7566	1981-03-12	3000.00	NULL	20
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

7902