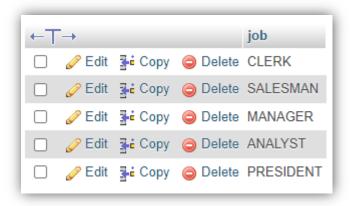
## **MODULE -3 Java- RDBMS & Database**

# **Programming With JDBC**

Q1. Select unique job from EMP table.

Ans: SELECT DISTINCT job FROM employee\_data;

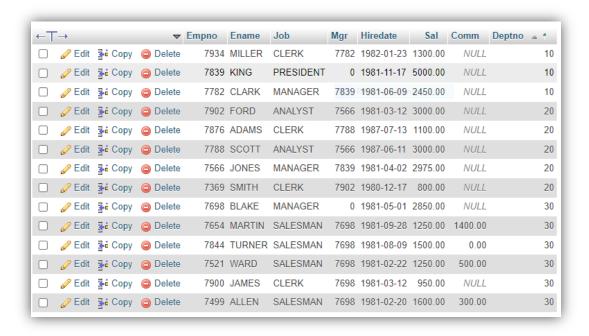


Q2. List the details of the emps in asc order of the Dptnos and desc of Jobs?

#### Ans:

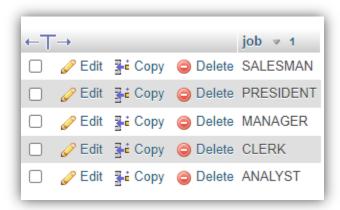
- SELECT \* FROM employee\_data ORDER BY Deptno ASC
- 2. SELECT \* FROM employee data ORDER BY Job DESC





Q3. Display all the unique job groups in the descending order?

Ans: SELECT DISTINCT job FROM employee\_data ORDER BY job DESC;



Q4. List the emps who joined before 1981.

Ans: SELECT \* FROM employee\_data WHERE hiredate < '1981-01-01'



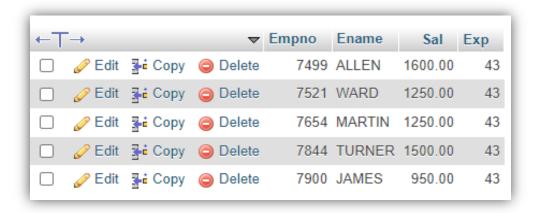
Q5. List the Empno, Ename, Sal, Daily sal of all emps in the asc order of Annsal.

Ans: SELECT Empno, Ename, Sal, (Sal / 30) AS Daily\_Sal, (Sal \* 12) AS Annsal FROM employee\_data ORDER BY Annsal ASC

←T	<b>→</b>		▽	Empno	Ename	Sal	Daily_Sal	Annsal 🔺 1
	Ø Edit	<b>≩-</b> Сору	Delete	7369	SMITH	800.00	26.666667	9600.00
		<b>≩</b> сору	Delete	7900	JAMES	950.00	31.666667	11400.00
	Edit	<b>≩-</b> Сору	Delete	7876	ADAMS	1100.00	36.666667	13200.00
	Edit	<b>≩</b> Copy	Delete	7521	WARD	1250.00	41.666667	15000.00
	Edit	<b>≩≟</b> Copy	Delete	7654	MARTIN	1250.00	41.666667	15000.00
		<b>≩-</b> Сору	Delete	7934	MILLER	1300.00	43.333333	15600.00
	Edit	<b>≩-</b> Сору	Delete	7844	TURNER	1500.00	50.000000	18000.00
		<b>≩-</b> Сору	Delete	7499	ALLEN	1600.00	53.333333	19200.00
	Edit	<b>≩-</b> Сору	Delete	7782	CLARK	2450.00	81.666667	29400.00
		<b>≩</b> сору	Delete	7698	BLAKE	2850.00	95.000000	34200.00
	Edit	<b>≩</b> Copy	Delete	7566	JONES	2975.00	99.166667	35700.00
	<i>⊘</i> Edit	<b>≩</b> сору	Delete	7902	FORD	3000.00	100.000000	36000.00
	Edit	<b>≩</b> Copy	Delete	7788	SCOTT	3000.00	100.000000	36000.00
	<i>⊘</i> Edit	<b>≩</b> € Copy	Delete	7839	KING	5000.00	166.666667	60000.00

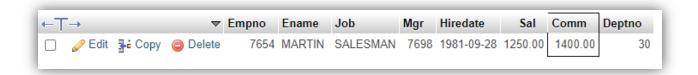
Q6. List the Empno, Ename, Sal, Exp of all emps working for Mgr 7369.

Ans: SELECT Empno, Ename, Sal, (YEAR(CURRENT\_DATE) - YEAR(hiredate)) AS Exp FROM employee\_data WHERE Mgr = 7698;



Q7. Display all the details of the emps who's Comm. Is more than their Sal?

Ans : SELECT \* FROM employee\_data WHERE Comm > Sal.



Q8. List the emps who are either 'CLERK' or 'ANALYST' in the Desc order

Ans: SELECT \* FROM employee data WHERE job = 'CLERK' OR 'ANALYST'



Q9. List the emps Who Annual sal ranging from 22000 and 45000.

Ans: SELECT Empno, Ename , Sal FROM employee\_data WHERE (Sal \* 12) BETWEEN 22000 AND 45000.



Q10.List the Enames those are starting with 'S' and with five characters.

Ans : SELECT Ename, LENGTH(Ename) AS name\_length FROM employee\_data WHERE Ename LIKE 'S%'



Q11. List the emps whose Empno not starting with digit78.

Ans: SELECT \*FROM employee data WHERE Empno NOT LIKE '78%'



## Q12. List all the Clerks of Deptno 20.

Ans: SELECT \* FROM Employees WHERE Job = 'Clerk' AND Deptno = 20;

⊢Τ	<b>−</b>		$\nabla$	Empno	Ename	Job	Mgr	Hiredate	Sal	Comm	Deptno
		<b>≩</b> Copy	Delete	7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
		<b>≩</b> ≟ Copy	Delete	7876	ADAMS	CLERK	7788	1987-07-13	1100.00	NULL	20

Q13.List the Emps who are senior to their own MGRS.

Ans: SELECT e1.Empno AS EmployeeEmpno,

- e1.Ename AS EmployeeName,
- e1.Job AS EmployeeJob,
- e1.MGR AS ManagerEmpno,
- e1.HireDate AS EmployeeHireDate,
- e1.Deptno AS EmployeeDeptno,
- e2.Ename AS ManagerName,
- e2.HireDate AS ManagerHireDate

FROM employee\_data e1

JOIN employee\_data e2 ON e1.MGR = e2.Empno

WHERE e1.HireDate < e2.HireDate;

EmployeeEmpno	EmployeeName	EmployeeJob	ManagerEmpno	EmployeeHireDate	EmployeeDeptno	ManagerName	ManagerHireDate
7369	SMITH	CLERK	7902	1980-12-17	20	FORD	1981-03-12
7499	ALLEN	SALESMAN	7698	1981-02-20	30	BLAKE	1981-05-01
7521	WARD	SALESMAN	7698	1981-02-22	30	BLAKE	1981-05-01
7566	JONES	MANAGER	7839	1981-04-02	20	KING	1981-11-17
7782	CLARK	MANAGER	7839	1981-06-09	10	KING	1981-11-17
7900	JAMES	CLERK	7698	1981-03-12	30	BLAKE	1981-05-01
7902	FORD	ANALYST	7566	1981-03-12	20	JONES	1981-04-02

### 14.List the Emps of Deptno 20 who's Jobs are same as Deptno10

Ans: SELECT e1.Empno, e1.Ename, e1.Job, e1.Deptno

FROM employee\_data e1

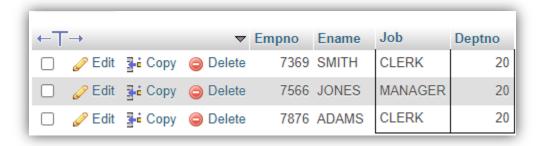
WHERE e1.Deptno = 20

AND e1.Job IN (

SELECT DISTINCT e2.Job

FROM employee\_data e2

WHERE e2.Deptno = 10 );



Q15.List the Emps who's Sal is same as FORD or SMITH in desc order of Sal.

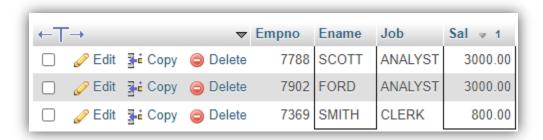
Ans: SELECT Empno, Ename, Job, Sal

FROM employee\_data

WHERE Sal IN (

SELECT Sal FROM employee\_data WHERE Ename IN ('FORD', 'SMITH'))

ORDER BY Sal DESC;



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

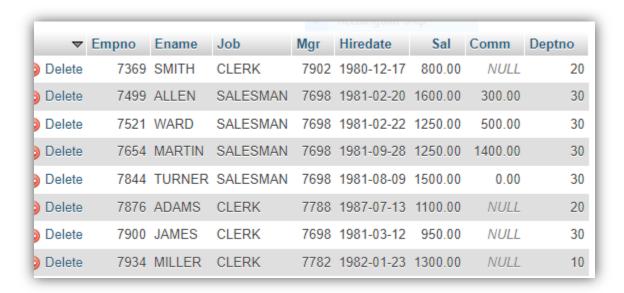
Ans: SELECT \* FROM employee\_data

WHERE job IN (

SELECT job FROM employee data WHERE ename = 'SMITH'

UNION

SELECT job FROM employee\_data WHERE ename = 'ALLEN');



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

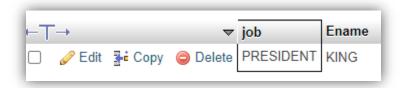
Ans: SELECT DISTINCT job, Ename

FROM employee data

WHERE deptno = 10

AND job NOT IN (

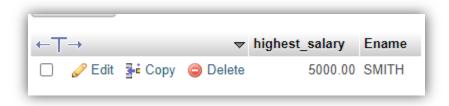
SELECT job FROM employee\_data WHERE deptno = 20);



18. Find the highest sal of EMP table.

Ans: SELECT MAX(sal) AS highest\_salary, Ename

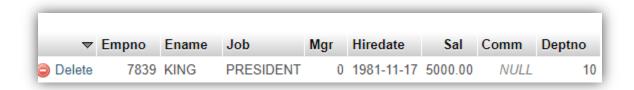
FROM employee\_data;



19. Find details of highest paid employee.

SELECT \* FROM employee\_data

WHERE sal = (SELECT MAX(sal) FROM employee\_data);



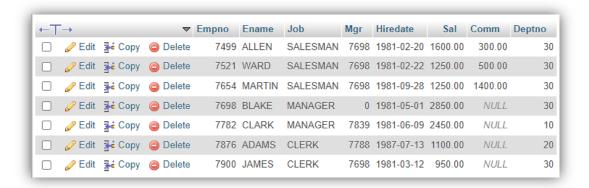
20. Find the totalsal given to the MGR.

Ans: SELECT SUM(sal) AS total sal FROM employee data WHERE job = 'Manager';



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

Ans: SELECT \* FROM employee\_data WHERE ename LIKE '%A%';



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

Ans: SELECT \* FROM employee\_data e1 WHERE sal = (SELECT MIN(sal) FROM employee\_data e2 WHERE e1.job = e2.job) ORDER BY job ASC;



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

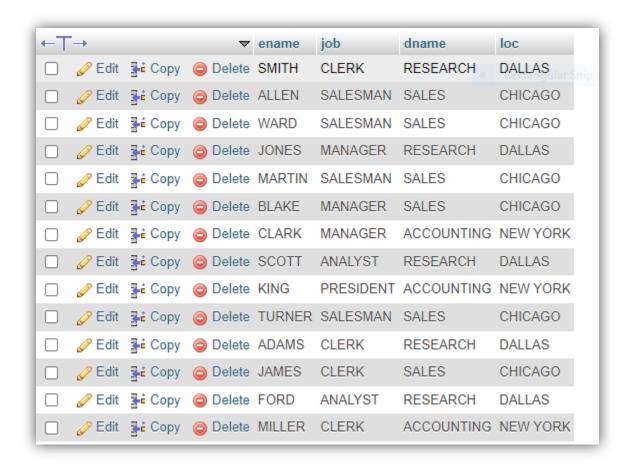
Ans: SELECT \*FROM employee\_data WHERE sal > (SELECT sal FROM employee\_data WHERE ename = 'Blake');



24. Create view v1 to select ename, job, dname, loc whose deptno are same.

Ans: CREATE VIEW v2 AS SELECT e.ename, e.job, d.dname, d.loc FROM employee\_data e

JOIN Dept d ON e.deptno = d.deptno;



25. Create a procedure with dno asinput parameter to fetch ename and dname.

Ans: DELIMITER \$\$

CREATE PROCEDURE fetch emp details(IN dno INT)

**BEGIN** 

SELECT e.ename, d.dname

FROM employee data e

JOIN dept\_table d ON e.deptno = d.deptno

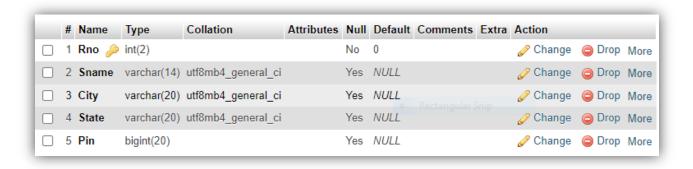
WHERE e.deptno = dno;

END \$\$

**DELIMITER**;

26.Add column Pin with bigint data type in table student.

Ans: ALTER TABLE student\_data ADD Pin BIGINT;



27. Modify the student table to change the sname length from 14 to 40. Create trigger to insert data in emp\_log table whenever any update of sal in EMP table. You can set action as 'New Salary'.

Ans: ALTER TABLE student\_table MODIFY sname VARCHAR(40);

