# Module-3 ( RDBMS & DATABASE PROGRAMMING WITH JDBC )

CREATE TABLE 1:-

CREATE TABLE table1 (

Empno int(4) PRIMARY KEY AUTO\_INCREMENT,

Ename varchar(10) , Job varchar(9) ,

Mgr int(4) ,

Hiredate date , Sal decimal(7,2) ,

Comm decimal(7,2), Deptno int(2) ,

)

CREATE DEPT TABLE :-

REATE TABLE dept

(

Deptno int(2) PRIMARY KEY, Dname varchar(14) ,

Loc varchar(13) ,

)

CREATE STUDENT TABLE :-

REATE TABLE student (

Rno int(2) PRIMARY KEY;

Sname varchar(14) ; City varchar(20) ;

State varchar(20) ;

)

EMP LOG TABLE:-

REATE TABLE emp log

(

Field int(5), Log\_date date , New\_salary int(10) , Action varchar(20) ,

)

DEPT TABLE DATA :-

CREATE TABLE

CREATE TABLE dept data( Deptno int(10) ,

dname varchar(20) , loc varchar(20) ,

)

INSERT DATA

INSERT INTO deptdata (Deptno,dname,loc) Values(10,ACCOUNTING,NEW YORK); INSERT INTO deptdata (Deptno,dname,loc) Values(20,RESEARCH,DALLAS);

INSERT INTO deptdata (Deptno,dname,loc) Values(30,SALES,CHICAGO);

INSERT INTO deptdata (Deptno,dname,loc) Values(40,OPERATIONS,BOSTON);

EMP TABLE DATA :-

REATE TABLE empdata

(

EMPNO int(10) ,

ename varchar(20) , job varchar(20) , mgr varchar(15) ,

hiredate varchar(20) , sal varchar(15) , comm varchar(15) , deptno int(10) ,

)

# Select unique job from EMP table

SELECT DISTINCT job FROM EMP;

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

SELECT \* FROM EMP ORDER BY deptno ASC, job DESC;

# Display all the unique job groups in the descending order?

SELECT DISTINCT job FROM EMP ORDER BY job DESC;

# List the emps who joined before 1981.

SELECT \* FROM EMP WHERE hiredate < '1981-01-01';

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

SELECT Empno, Ename, Sal, Sal/365 AS Daily\_Sal FROM EMP ORDER BY Sal/365 ASC;

1. **List the Empno, Ename, Sal, Exp of all emps working for Mgr 7369.** SELECT Empno, Ename, Sal, (SYSDATE - hiredate) AS Experience FROM EMP WHERE mgr = 7369;

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

SELECT \* FROM EMP WHERE comm > sal;

# List the emps who are either ‘CLERK’ or ‘ANALYST’ in the Desc order

SELECT \* FROM EMP WHERE job IN ('CLERK', 'ANALYST') ORDER BY job DESC;

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

SELECT \*FROM EMP WHERE sal\*12 BETWEEN 22000 AND 45000

# List the Enames those are starting with ‘S’ and with five characters.

SELECT Ename FROM EMP WHERE Ename LIKE 'S ';

# List the emps whose Empno not starting with digit78

SELECT \* FROM EMP WHERE NOT REGEXP\_LIKE(Empno, '^78');

# List all the Clerks of Deptno 20.

SELECT \* FROM EMP WHERE job = 'CLERK' AND deptno = 20;

# List the Emps who are senior to their own MGRS

SELECT \* FROM EMP WHERE hiredate < (SELECT hiredate FROM EMP E2 WHERE

E1.mgr = E2.empno);

# List the Emps of Deptno 20 who’s Jobs are same as Deptno10

SELECT \* FROM EMP E1

WHERE deptno = 20 AND job IN (SELECT DISTINCT job FROM EMP WHERE deptno = 10);

# 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 IN ('FORD', 'SMITH')) ORDER BY sal DESC;

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

SELECT \* FROM EMP WHERE job IN (SELECT job FROM EMP WHERE ename IN ('SMITH', 'ALLEN'));

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

SELECT DISTINCT job FROM EMP WHERE deptno = 10 AND job NOT IN (SELECT

job FROM EMP WHERE deptno = 20);

# Find the highest sal of EMP table

SELECT MAX(sal) AS highest\_sal FROM EMP;

# Find details of highest paid employee.

SELECT \* FROM EMP WHERE sal = (SELECT MAX(sal) FROM EMP);

# Find the total sal given to the MGR

SELECT mgr, SUM(sal) AS total\_sal FROM EMP GROUP BY mgr;

# List the emps whose names contains ‘A’.

SELECT \* FROM EMP WHERE LOWER(ename) LIKE '%a%';

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

SELECT job, MIN(sal) AS min\_sal FROM EMP GROUP BY job ORDER BY min\_sal ASC;

# List the emps whose sal greater than Blake’s sal.

SELECT \* FROM EMP WHERE sal > (SELECT sal FROM EMP WHERE ename = 'BLAKE');

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

CREATE VIEW v1 AS

SELECT e.ename, e.job, d.dname, d.loc FROM EMP e

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

1. **Create a procedure with dno as input parameter to fetch ename and dname.** CREATE OR REPLACE PROCEDURE GetEmpDetails(p\_deptno NUMBER) AS BEGIN

SELECT ename, dname

INTO OUT\_EMP\_NAME, OUT\_DEPT\_NAME FROM EMP e

JOIN DEPT d ON e.deptno = d.deptno WHERE e.deptno = p\_deptno;

END

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

ALTER TABLE student ADD pin BIGINT;

# Modify the student table to change the sname length from 14 to 40.

-- Modify the column length

ALTER TABLE student MODIFY sname VARCHAR2(40);