

# Project Title: Delivery Management System (Oracle 19c SQL)

## How to create user (LOGIN WITH DBA PRIVILEGES)

1. system/tiger
2. Conn
3. SELECT USERNAME FROM DBA\_USERS;
4. CREATE USER PANKAJ IDENTIFIED BY tiger;
5. GRANT DBA TO USER;
6. Grant succeeded.

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SET PAGESIZE 50;

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SET LINESIZE 150;

## **1 .The project Name is Delivery Management System**

- **DDL (CREATE, ALTER, DROP, TRUNCATE, RENAME, FLASHBACK)**
- **DML (INSERT, UPDATE, DELETE, INSERT ALL)**
- **DQL / DRL (SELECT Queries)**
- **TCL (COMMIT, ROLLBACK)**
- **DCL (GRANT, REVOKE)**
- **CRUD Implementation**

## 2. DDL (Data Definition Language)

### 2.1 Create Tables

#### EMP

```
CREATE TABLE EMP (  
    EMPNO NUMBER(4), ENAME VARCHAR2(50) NOT NULL,  
    JOB VARCHAR2(20) CHECK (JOB IN ('COURIER', 'DISPATCHER',  
'MANAGER')),  
    SAL NUMBER(7,2) CHECK (SAL > 0),  
    HIREDATE DATE DEFAULT SYSDATE,  
    DEPTNO NUMBER(2)  
);
```

## **DEPT**

```
CREATE TABLE DEPT (  
    DEPTNO NUMBER(2) PRIMARY KEY,  
    DNAME VARCHAR2(50) NOT NULL UNIQUE,  
    LOC VARCHAR2(50) NOT NULL  
);
```

## **DELIVERIES**

```
CREATE TABLE DELIVERIES (  
    ORDER_ID NUMBER(6), EMPNO NUMBER(4),  
    DELIVERY_DATE DATE DEFAULT SYSDATE,  
    STATUS VARCHAR2(15) CHECK (STATUS IN ('PENDING', 'DELIVERED',  
'CANCELLED')),  
    LOCATION VARCHAR2(100),  
    CUSTOMER_NAME VARCHAR2(50)  
);  
  
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SELECT * FROM TAB;
```

## **2.2 ALTER TABLE**

```
ALTER TABLE EMP ADD PHONE VARCHAR2(15);
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```
DESC EMP;
```

## 2.3 RENAME TABLE

```
RENAME EMP TO EMPLOYEES;
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```
SELECT * FROM TAB;
```

## 2.4 TRUNCATE TABLE

### INSERTING SOME DETAILS TO DELIVERIES

```
INSERT INTO DELIVERIES (ORDER_ID, EMPNO, DELIVERY_DATE, STATUS,  
LOCATION, CUSTOMER_NAME)  
VALUES (101, 2001, SYSDATE, 'PENDING', 'Mumbai', 'Rajesh Sharma');
```

```
INSERT INTO DELIVERIES (ORDER_ID, EMPNO, DELIVERY_DATE, STATUS,  
LOCATION, CUSTOMER_NAME)
```

```
VALUES (102, 2002, SYSDATE - 1, 'DELIVERED', 'Pune', 'Anita Verma');
```

```
INSERT INTO DELIVERIES (ORDER_ID, EMPNO, DELIVERY_DATE, STATUS,  
LOCATION, CUSTOMER_NAME)
```

```
VALUES (103, 2003, SYSDATE - 2, 'CANCELLED', 'Hyderabad', 'Sunil Kumar');
```

```
INSERT INTO DELIVERIES (ORDER_ID, EMPNO, DELIVERY_DATE, STATUS,  
LOCATION, CUSTOMER_NAME)
```

```
VALUES (104, 2004, SYSDATE, 'PENDING', 'Bangalore', 'Meena Rao');
```

```
INSERT INTO DELIVERIES (ORDER_ID, EMPNO, DELIVERY_DATE, STATUS,  
LOCATION, CUSTOMER_NAME)
```

```
VALUES (105, 2005, SYSDATE - 3, 'DELIVERED', 'Chennai', 'Vikram Singh');
```

```
COMMIT;
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```
SELECT * FROM DELIVERIES;
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```
TRUNCATE TABLE DELIVERIES;
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SELECT \* FROM DELIVERIES;

## 2.5 DROP TABLE

DROP TABLE DEPT;

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SELECT \* FROM TAB;

## 2.6 RECYCLEBIN

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SELECT \* FROM TAB;

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SHOW RECYCLEBIN;

## **2.7 FLASHBACK**

FLASHBACK TABLE DEPT TO BEFORE DROP;

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## **2.8 PURGE**

PURGE TABLE DEPT;

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SHOW RECYCLEBIN;

# **3. DML (Data Manipulation Language)**

## **3.1 INSERT DATA**

INSERT INTO EMPLOYEES (EMPNO, ENAME, JOB, SAL, DEPTNO) VALUES  
(1001, 'John Doe', 'COURIER', 2500, 30);

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```
SELECT * FROM EMPLOYEES;
```

## 3.2 INSERT ALL

### INSERT ALL

```
INSERT ALL
  INTO EMPLOYEES (EMPNO, ENAME, JOB, SAL, DEPTNO) VALUES (1002,
    'Alice Smith', 'DISPATCHER', 3200, 20)
  INTO EMPLOYEES (EMPNO, ENAME, JOB, SAL, DEPTNO) VALUES (1003,
    'Bob Johnson', 'MANAGER', 5000, 10)
SELECT * FROM DUAL;
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```
SELECT * FROM EMPLOYEES;
```

## 3.3 UPDATE DATA

```
UPDATE EMPLOYEES SET SAL = 2800 WHERE EMPNO = 1001;
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```
SELECT * FROM EMPLOYEES;
```

### **3.4 DELETE DATA**

```
DELETE FROM EMPLOYEES WHERE EMPNO = 1001;
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```
SELECT * FROM EMPLOYEES;
```

## **4. DQL / DRL (Data Query / Data Retrieval Language)**

### **4.1 SELECT Queries**

```
SELECT * FROM EMPLOYEES;
```

```
SELECT * FROM DELIVERIES WHERE STATUS = 'PENDING';
```

## **5. TCL (Transaction Control Language)**

### **5.1 COMMIT**

```
INSERT INTO EMPLOYEES (EMPNO, ENAME, JOB, SAL, DEPTNO) VALUES  
(1004, 'David Green', 'COURIER', 2600, 30);
```

```
COMMIT;
```

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```
SELECT * FROM EMPLOYEES;
```

### **5.2 ROLLBACK**

```
DELETE FROM EMPLOYEES WHERE EMPNO = 1004;  
ROLLBACK;
```

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```

```
SELECT * FROM EMPLOYEES;
```

## **6. DCL (Data Control Language)**

### **6.1 GRANT**

```
GRANT SELECT, INSERT ON EMPLOYEES TO PANKAJ;
```

### **6.2 REVOKE**

```
REVOKE INSERT ON EMPLOYEES FROM PANKAJ;
```

## **7. CRUD-Based Delivery Management System**

### **7.1 Create**

```
CREATE TABLE DELIVERIES (  
    ORDER_ID NUMBER(6) PRIMARY KEY,  
    EMPNO NUMBER(4),  
    DELIVERY_DATE DATE DEFAULT SYSDATE,  
    STATUS VARCHAR2(15) CHECK (STATUS IN ('PENDING', 'DELIVERED',  
'CANCELLED')),  
    LOCATION VARCHAR2(100),  
    CUSTOMER_NAME VARCHAR2(50)  
);
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```
INSERT INTO DELIVERIES (ORDER_ID, EMPNO, STATUS, LOCATION,  
CUSTOMER_NAME)  
VALUES (5001, 1001, 'PENDING', 'Downtown NY', 'Michael Brown');
```

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```
SELECT * FROM DELIVERIES;
```

## 7.2 Read

```
SELECT * FROM DELIVERIES WHERE STATUS = 'PENDING';
```

## 7.3 Update

```
UPDATE DELIVERIES SET STATUS = 'DELIVERED' WHERE ORDER_ID = 5001;
```

## 7.4 Delete

```
DELETE FROM DELIVERIES WHERE ORDER_ID = 5001;
```

## **HOW TO DROP THE USER**

- 1) Exit;
- 2) Login with DBA access
- 3) I.e. system/tiger
- 4) DROP USER PANKAJ CASCADE;