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**Batch:** I1-1  
**SUBJECT:** DBMS

## EXPERIMENT NO. 6

### Practical Questions:

- 1) Create a table with a name Sales\_Order having columns order\_no as primary key, Order date should not be a null value, client\_no, order\_status, salesman\_no.

```
CREATE TABLE Sales_Order (  
order_no INT PRIMARY KEY,  
order_date DATE NOT NULL,  
client_no INT,  
order_status  
VARCHAR(50),  
salesman_no INT );
```

The screenshot displays the Oracle Application Express (APEX) SQL Workshop interface. The 'SQL Commands' tab is active, showing a series of SQL statements that have been executed. The statements include the creation of a table named 'clientMaster' with columns 'client\_no' (primary key), 'name', 'address', 'city', 'pincode', and 'order\_no'. It also includes two 'INSERT INTO' statements for the 'clientMaster' table. The 'Results' section at the bottom indicates that the table was created successfully and the execution took 0.00 seconds. The interface includes a navigation bar with tabs for Home, Application Builder, SQL Workshop, Team Development, and Administration. The 'SQL Workshop' tab is selected, and the 'SQL Commands' sub-tab is active. The 'Schema' dropdown is set to 'DJSCE6'. The 'Autocommit' checkbox is checked, and the 'Rows' dropdown is set to 10. The 'Save' and 'Run' buttons are visible. The 'Results' section shows the output of the executed commands, including the table creation and data insertion. The table 'clientMaster' has been created, and two rows of data have been inserted. The first row has 'client\_no' 1, 'name' 'John Doe', 'address' '123 Main St', 'city' 'New York', 'pincode' '10001', and 'order\_no' 1. The second row has 'client\_no' 2, 'name' 'Jane Doe', 'address' '456 Main St', 'city' 'New York', 'pincode' '10001', and 'order\_no' 2. The 'Results' section also shows the 'Explain' and 'Describe' buttons, and a 'Saved SQL' button. The 'History' button is also visible. The 'Application Express 4.0.2.00.09' version is displayed at the bottom right. The system tray at the bottom shows the date and time as 13:49 on 02-11-2023, and the temperature as 32°C.

```
CREATE TABLE clientMaster (  
  client_no INT PRIMARY KEY,  
  name VARCHAR(100),  
  address VARCHAR(255),  
  city VARCHAR(50),  
  pincode VARCHAR(10),  
  order_no INT,  
  FOREIGN KEY (order_no) REFERENCES Sales_Order(order_no)  
);  
  
INSERT INTO clientMaster (client_no, name, address, city, pincode, order_no)  
VALUES (1, 'John Doe', '123 Main St', 'New York', '10001', 1);  
  
INSERT INTO clientMaster (client_no, name, address, city, pincode, order_no)
```

Table created.  
0.00 seconds



1. Insert the records in the table in such a way that few records should show constraint violation for the columns order\_no & order\_date.

Order number

```
INSERT INTO Sales_Order (order_no, order_date, client_no, order_status,  
salesman_no)  
VALUES (1, TO_DATE('2023-11-03', 'YYYY-MM-DD'), 1003, 'Delivered',  
2003);
```

ORA-00001: unique constraint (DJSCE6.SYS\_C008299) violated

Order Date:

```
INSERT INTO Sales_Order (order_no, client_no, order_status,  
salesman_no) VALUES (4, 1004, 'Pending', 2004);
```

ORA-01400: cannot insert NULL into ("DJSCE6"."SALES\_ORDER"."ORDER\_DATE")

2. Display all the records of the Sales\_Order table. select \* from Sales\_order;

ORDER_NO	ORDER_DATE	CLIENT_NO	ORDER_STATUS	SALESMAN_NO
1	11/01/2023	1001	Pending	2001
2	11/02/2023	1002	Shipped	2002
3	11/04/2023	1003	Shipped	2002

3 rows returned in 0.00 seconds [Download](#)

3. Add the constraint to the Sales\_Order table that client\_no column should not have duplicate values & also it should allow null values to be inserted.

```
ALTER TABLE Sales_Order  
ADD CONSTRAINT unique_client_no UNIQUE (client_no);
```

ORA-02261: such unique or primary key already exists in the table



- Display all the records of the Sales\_Order table.
- Create a table with a name Client\_Master having columns client\_no as a primary key, name, address, city, pincode, order\_no as foreign key referencing Sales\_Order order\_no.

```
CREATE TABLE ClientMaster (
  client_no INT PRIMARY KEY,
  name VARCHAR(100),
  address VARCHAR(255),
  city VARCHAR(50),
  pincode VARCHAR(10),
  order_no INT,
  FOREIGN KEY (order_no) REFERENCES Sales_Order(order_no)
);

INSERT INTO client_Master (client_no, name, address, city, pincode, order_no)
VALUES (1, 'John Doe', '123 Main St', 'New York', '10001', 1);

INSERT INTO client_Master (client_no, name, address, city, pincode, order_no)
```

Table created.  
0.00 seconds

- Insert the records in the Client\_Master table in such a way that few records should show constraint violation for the column order\_no.

```
INSERT INTO Client_Master (client_no, name, address, city, pincode,
order_no) VALUES (4, 'Sue Davis', '101 Elm Blvd', 'Houston', '77004', 4);
```

ORA-00001: unique constraint (DJSCE6.SYS\_C008301) violated

- Display all the records of the Client\_Master table. select \* from Client\_Master;

CLIENT_NO	NAME	ADDRESS	CITY	PINCODE	ORDER_NO
1	John Doe	123 Main St	New York	10001	1
2	Jane Smith	456 Oak Ave	Los Angeles	90002	2
3	Bob Johnson	789 Pine Rd	Chicago	60603	3
5	Mike Williams	202 Cedar Ln	Phoenix	85001	-



8. Delete a record from the Client\_Master table whose client\_no is 1

```
DELETE FROM Client_Master  
WHERE client_no = 1;
```

1 row(s) deleted.

0.00 seconds

9. Delete a record from the Sales\_Order table whose order\_no is 2.

```
DELETE FROM Sales_order  
WHERE order_no = 2;
```

ORA-02292: integrity constraint (DJSCE6.SYS\_C008302) violated - child record found

Update any one value of the order\_no column to a new value of Sales\_Order table.

```
UPDATE Sales_Order  
SET order_no = 5  
WHERE order_no = 1;
```

1 row(s) updated.

0.00 seconds

10. Create a table with name Client\_Master1 having columns client\_no as primary key, name, city & balance. Names starting with 'a', city should be either Mumabi or Delhi & balance should be greater than 1000.

```
CREATE TABLE Client_Master1 (  
client_no INT PRIMARY KEY,  
name VARCHAR(100),  
city VARCHAR(50),
```



```
balance DECIMAL(10,2),  
CONSTRAINT check_name_city  
CHECK (SUBSTR(name, 1, 1) = 'a' AND (city IN ('Mumbai', 'Delhi')) AND  
balance > 1000)  
);
```

Table created.

0.01 seconds

11. Insert the records in the table.

```
INSERT INTO Client_Master1 (client_no, name, city, balance)  
VALUES (1, 'alice', 'Mumbai', 1500.00);
```

```
INSERT INTO Client_Master1 (client_no, name, city, balance)  
VALUES (2, 'alex', 'Delhi', 2000.00);
```

```
INSERT INTO Client_Master1 (client_no, name, city,  
balance) VALUES (4, 'Amy', 'Delhi', 2500.00);
```

1 row(s) inserted.

0.00 seconds

12. Display all the records of the table

```
Select * from Client_Master1;
```

CLIENT_NO	NAME	CITY	BALANCE
2	alex	Delhi	2000
1	alice	Mumbai	1500
4	amy	Delhi	2500