NAME: Ayush Vinod Upadhyay
ROLL No: I025
Sap ID: 60003220131
BRANCH: Information Technology
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 );
```

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;

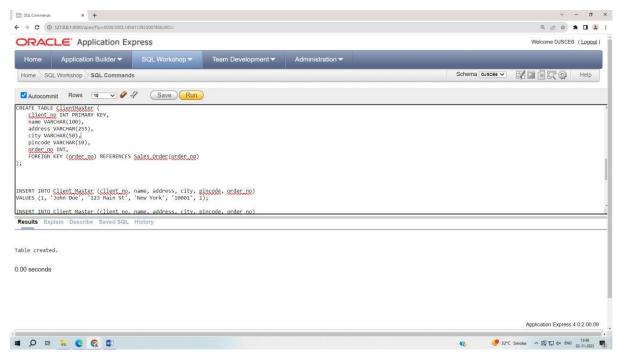| ORDER_NO	ORDER_DATE	CLIENT_NO	ORDER_STATUS	SALESMAN_NO
1	11/01/2023	1001	Pending	2001
2	11/02/2023	1002	Shipped	2002
3	11/04/2023	1003	Shipped	2002

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
   ```

4. Display all the records of the Sales_Order table.

5. 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.

6. 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
```

7. 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