Assignment – 3

1. **Count the total number of orders.**

   SQL Query:
   SELECT COUNT(Order_no) FROM sales_order;

   Output:

   ```
   SQL> SELECT COUNT(Order_no) from sales_order;

   COUNT(ORDER_NO)
   ---------------
                 6
   ```

2. **Calculate the average price of all the products.**

   SQL Query:
   SELECT AVG(Sell_price) FROM product_master;

   Output:

   ```
   SQL> SELECT AVG(Sell_price) from product_master;

   AVG(SELL_PRICE)
   ---------------
       3663.88889
   ```

3. **Count the number of products having price greater than or equal to 1500.**

   SQL Query:
   SELECT COUNT(Sell_price) FROM product_master
   WHERE Sell_price>=1500;

   Output:

   ```
   SQL> SELECT COUNT(Sell_price) FROM product_master
     2  WHERE Sell_price>=1500;

   COUNT(SELL_PRICE)
   -----------------
                   4
   ```

4. **Determine the maximum and minimum product prices. Rename the output as max_price and min_price respectively.**

   SQL Query:
   SELECT MAX(Sell_price) max_price, MIN(Sell_price) min_price FROM product_master;

   Output:

   ```
   SQL> SELECT MAX(Sell_price) max_price, MIN(Sell_price) min_price FROM product_master;

    MAX_PRICE  MIN_PRICE
   ---------- ----------
        12000        525
   ```

5. Change the City of the Client_no 'C005' to 'Madras'.

SQL Query:
UPDATE client_master
SET city='Madras'
WHERE client_no='C005';

Output:

```
SQL> UPDATE client_master
  2  SET city='Madras'
  3  WHERE client_no='C005';

1 row updated.

SQL> SELECT * FROM client_master;

CLIENT NAME                     ADDRESS1            ADDRESS2            CITY            STATE             PINCODE BALANCE_DUE
------ ------------------------ ------------------- ------------------- --------------- ----------------- ---------- -----------
C001   Ivan Bayross             P-76                Worli               Bombay          Maharashtra        400054       15000
C002   Vandana Satial           128                 Adams Street        Madras          Tamilnadu          780001           0
C003   Pramada Jaguste          157                 Gopalpur            Kolkata         West Bengal        700058        5000
C004   Basu Navindgi            A/12                Nariman             Bombay          Maharashtra        400056           0
C005   Ravi Sreedharan          B/34                Rajnagar            Madras          Delhi              100001        2000
C006   Rukmini                  Q-12                Bandra              Bombay          Maharashtra        400050           0

6 rows selected.
```

6. Change the Bal_due of Client_no 'C005' to Rs.3000/-.

SQL Query:
UPDATE client_master
SET Balance_due=3000
WHERE client_no='C005';

Output:

```
SQL> UPDATE client_master
  2  SET Balance_due=3000
  3  WHERE client_no='C005';

1 row updated.

SQL> SELECT * FROM client_master;

CLIENT NAME                     ADDRESS1            ADDRESS2            CITY            STATE             PINCODE BALANCE_DUE
------ ------------------------ ------------------- ------------------- --------------- ----------------- ---------- -----------
C001   Ivan Bayross             P-76                Worli               Bombay          Maharashtra        400054       15000
C002   Vandana Satial           128                 Adams Street        Madras          Tamilnadu          780001           0
C003   Pramada Jaguste          157                 Gopalpur            Kolkata         West Bengal        700058        5000
C004   Basu Navindgi            A/12                Nariman             Bombay          Maharashtra        400056           0
C005   Ravi Sreedharan          B/34                Rajnagar            Madras          Delhi              100001        3000
C006   Rukmini                  Q-12                Bandra              Bombay          Maharashtra        400050           0

6 rows selected.
```

7. Delete from client_master where the column state holds the value 'Tamilnadu'.

SQL Query:
DELETE FROM client_master
WHERE state='Tamilnadu';

Output:

```
SQL> DELETE FROM client_master
  2  WHERE state='Tamilnadu';
DELETE FROM client_master
*
ERROR at line 1:
ORA-02292: integrity constraint (SYSTEM.SYS_C007019) violated - child record found
```

8. **Add a column called 'Telephone' of data type 'number' and size 10 in the table client_master.**

SQL Query:
ALTER TABLE client_master
ADD(Telephone NUMBER(10));

Output:

```
SQL> ALTER TABLE client_master
  2  ADD(Telephone NUMBER(10));

Table altered.

SQL> desc client_master;
 Name                          Null?    Type
 ----------------------------- -------- ----------------
 CLIENT_NO                     NOT NULL VARCHAR2(6)
 NAME                                   VARCHAR2(30)
 ADDRESS1                               VARCHAR2(30)
 ADDRESS2                               VARCHAR2(30)
 CITY                                   VARCHAR2(15)
 STATE                                  VARCHAR2(15)
 PINCODE                                NUMBER(6)
 BALANCE_DUE                            NUMBER(10,2)
 TELEPHONE                              NUMBER(10)
```

9. **Change the size of data type Pin_code to 10 in the table client_master.**

SQL Query:
ALTER TABLE client_master
MODIFY(Pincode NUMBER(10));

Output:

```
SQL> ALTER TABLE client_master
  2  MODIFY(Pincode NUMBER(10));

Table altered.

SQL> desc client_master;
 Name                          Null?    Type
 ----------------------------- -------- ----------------
 CLIENT_NO                     NOT NULL VARCHAR2(6)
 NAME                                   VARCHAR2(30)
 ADDRESS1                               VARCHAR2(30)
 ADDRESS2                               VARCHAR2(30)
 CITY                                   VARCHAR2(15)
 STATE                                  VARCHAR2(15)
 PINCODE                                NUMBER(10)
 BALANCE_DUE                            NUMBER(10,2)
 TELEPHONE                              NUMBER(10)
```

10. **Drop the column Address2 from the table client_master.**

SQL Query:
ALTER TABLE client_master
DROP COLUMN Address2;

Output:

```
SQL> ALTER TABLE client_master
  2  DROP COLUMN Address2;

Table altered.

SQL> desc client_master;
 Name                          Null?    Type
 ----------------------------- -------- ----------------
 CLIENT_NO                     NOT NULL VARCHAR2(6)
 NAME                                   VARCHAR2(30)
 ADDRESS1                               VARCHAR2(30)
 CITY                                   VARCHAR2(15)
 STATE                                  VARCHAR2(15)
 PINCODE                                NUMBER(10)
 BALANCE_DUE                            NUMBER(10,2)
 TELEPHONE                              NUMBER(10)
```

11. **Create another table client_master_duplicate with the same structure of client_master(without copying the data of the table client_master).**

    SQL Query:
    CREATE TABLE client_master_duplicate
    AS (SELECT * FROM client_master WHERE 1=2);

    Output:

```
SQL> CREATE TABLE client_master_duplicate
  2  AS (SELECT * FROM client_master WHERE 1=2);

Table created.

SQL> desc client_master_duplicate;
 Name                          Null?    Type
 ----------------------------- -------- ----------------
 CLIENT_NO                              VARCHAR2(6)
 NAME                                   VARCHAR2(30)
 ADDRESS1                               VARCHAR2(30)
 CITY                                   VARCHAR2(15)
 STATE                                  VARCHAR2(15)
 PINCODE                                NUMBER(10)
 BALANCE_DUE                            NUMBER(10,2)
 TELEPHONE                              NUMBER(10)
```

12. **Insert the data into client_master_duplicate table from client_master table.**

    SQL Query:
    INSERT INTO client_master_duplicate (SELECT * FROM client_master);

    Ouput:

```
SQL> INSERT INTO client_master_duplicate (SELECT * FROM client_master);

6 rows created.

SQL> select * from client_master_duplicate;

CLIENT NAME                   ADDRESS1                       CITY             STATE              PINCODE BALANCE_DUE  TELEPHONE
------ ----------------------- ------------------------------ ---------------- ---------------- ---------- ----------- ----------
C001   Ivan Bayross            P-76                           Bombay           Maharashtra        400054        15000
C002   Vandana Satial          128                            Madras           Tamilnadu          780001            0
C003   Pramada Jaguste         157                            Kolkata          West Bengal        700058         5000
C004   Basu Navindgi           A/12                           Bombay           Maharashtra        400056            0
C005   Ravi Sreedharan         B/34                           Delhi            Delhi              100001         2000
C006   Rukmini                 Q-12                           Bombay           Maharashtra        400050            0

6 rows selected.
```

13. **Rename the table client_master_duplicate to c_master.**

    SQL Query:
    RENAME client_master_duplicate TO c_master;

    Output:

```
SQL> RENAME client_master_duplicate TO c_master;

Table renamed.
```

14. **Destroy the table c_master with its data.**

    SQL Query:
    DROP TABLE c_master;

    Ouput:

```
SQL> DROP TABLE c_master;

Table dropped.
```