Assignment No	1
Title	Implementing partioning concept
Objective	Learn Range and list partioning
Roll No	MCA2565

1.Created a table with range partition

```
SQL> create table sale(
  2    prod_id number(5), cust_id number(5), time_id date, channel_id char(5), promo_id number(5), quantity_sold number(5), amount_sold number(10))
  3   partition by range(time_id)
  4   (partition sales_q1_2006 values less than (to_date('31-MAR-2006','dd-MON-yyyy')),
  5   partition sales_q2_2006 values less than (to_date('31-MAY-2006','dd-MON-yyyy')),
  6   partition sales_q3_2006 values less than (to_date('30-SEP-2006','dd-MON-yyyy')),
  7  partition sales_q4_2006 values less than (to_date('31-DEC-2006','dd-MON-yyyy')));

Table created.
```

2.partition

```
SQL> select table_name, partition_name, high_value, num_rows from
  2   user_tab_partitions where table_name='SALE';

TABLE_NAME
------------------------------------------------------------------------------
PARTITION_NAME
------------------------------------------------------------------------------
HIGH_VALUE
------------------------------------------------------------------------------
  NUM_ROWS
----------
SALE
SALES_Q1_2006
TO_DATE(' 2006-03-31 00:00:00', 'SYYYY-MM-DD HH24:MI:SS', 'NLS_CALENDAR=GREGORIA



TABLE_NAME
------------------------------------------------------------------------------
PARTITION_NAME
------------------------------------------------------------------------------
HIGH_VALUE
------------------------------------------------------------------------------
  NUM_ROWS
----------
SALE
SALES_Q2_2006
TO_DATE(' 2006-05-31 00:00:00', 'SYYYY-MM-DD HH24:MI:SS', 'NLS_CALENDAR=GREGORIA
```

3.insert a data into partition

```
SQL> insert into sale values(2015,103,'15-Mar-2006',101,234,23,1029);

1 row created.

SQL> insert into sale values(3013,204,'03-Apr-2006',103,456,56,2938);

1 row created.

SQL> insert into sale values(6016,302,'27-Jun-2006',105,567,43,3847);

1 row created.

SQL> insert into sale values(8101,404,'05-Aug-2006',204,678,95,4756);

1 row created.

SQL> insert into sale values(4106,501,'17-Nov-2006',206,789,62,2374);

1 row created.

SQL> insert into sale values(8014,603,'23-Feb-2006',303,901,83,6358);

1 row created.

SQL> insert into sale values(2761,625,'13-Sep-2006',403,432,57,9341);

1 row created.
```

4. Partition with data

```
SQL> select * from sale partition (sales_q1_2006);

   PROD_ID    CUST_ID TIME_ID   CHANN   PROMO_ID QUANTITY_SOLD AMOUNT_SOLD
---------- ---------- --------- ----- ---------- ------------- -----------
      2015        103 15-MAR-06 101          234            23        1029
      8014        603 23-FEB-06 303          901            83        6358

SQL>  select * from sale partition (sales_q2_2006);

   PROD_ID    CUST_ID TIME_ID   CHANN   PROMO_ID QUANTITY_SOLD AMOUNT_SOLD
---------- ---------- --------- ----- ---------- ------------- -----------
      3013        204 03-APR-06 103          456            56        2938

SQL>  select * from sale partition (sales_q3_2006);

   PROD_ID    CUST_ID TIME_ID   CHANN   PROMO_ID QUANTITY_SOLD AMOUNT_SOLD
---------- ---------- --------- ----- ---------- ------------- -----------
      6016        302 27-JUN-06 105          567            43        3847
      8101        404 05-AUG-06 204          678            95        4756
      2761        625 13-SEP-06 403          432            57        9341

SQL>  select * from sale partition (sales_q4_2006);

   PROD_ID    CUST_ID TIME_ID   CHANN   PROMO_ID QUANTITY_SOLD AMOUNT_SOLD
---------- ---------- --------- ----- ---------- ------------- -----------
      4106        501 17-NOV-06 206          789            62        2374
```

5.adding new partition

```
SQL> alter table sale add partition sales_q1_2007 values less than(TO_DATE('31-MAR-2007','dd-MON-yyyy'));

Table altered.
```

6.showing new partition

```
SQL>  select table_name, partition_name, high_value, num_rows from
  2  user_tab_partitions where table_name='SALE';

TABLE_NAME
------------------------------------------------------------------------------
PARTITION_NAME
------------------------------------------------------------------------------
HIGH_VALUE
------------------------------------------------------------------------------
  NUM_ROWS
----------
SALE
SALES_Q1_2006
TO_DATE(' 2006-03-31 00:00:00', 'SYYYY-MM-DD HH24:MI:SS', 'NLS_CALENDAR=GREGORIA



TABLE_NAME
------------------------------------------------------------------------------
PARTITION_NAME
------------------------------------------------------------------------------
HIGH_VALUE
------------------------------------------------------------------------------
  NUM_ROWS
----------
SALE
SALES_Q1_2007
TO_DATE(' 2007-03-31 00:00:00', 'SYYYY-MM-DD HH24:MI:SS', 'NLS_CALENDAR=GREGORIA
```

7. Delete a data from table by truncate command

alter table sale truncate partition sales_q2_2006

8. Deleting partition by drop command

```
SQL> alter table sale drop partition sales_q3_2006;

Table altered.
```