

Practical 3: Creating and working with Sequence

1. Write a PL/SQL block to create a sequence by using cycle and insert the values in a table, altering sequences.

```
Run SQL Command Line
SQL> set serveroutput on
SQL> create sequence seq1
  2 start with 1
  3 maxvalue 10
  4 cycle
  5 cache 2;

Sequence created.

SQL> create table rno(rollno int);

Table created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> select * from rno;

   ROLLNO
-----
        1
        2
        3
        4
        5

SQL>
```

```
Run SQL Command Line
SQL> alter sequence seq1
  2 increment by 2
  3 cycle
  4 cache 2;

Sequence altered.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> insert into rno values(seq1.nextval);

1 row created.

SQL> select * from rno;

   ROLLNO
-----
        1
        2
        3
        4
        5
        7
        9
        1
        3

9 rows selected.
```

2. Write a sequence as 10, 20, 30 .. 100 and bind it with the table product (product no, product name).

Run SQL Command Line

```
SQL> create table product(productno int, productname varchar(30));
Table created.

SQL> create sequence seq2
  2 start with 10
  3 increment by 10
  4 maxvalue 100;
Sequence created.

SQL> insert into product values(seq2.nextval,'dharmit');
1 row created.

SQL> insert into product values(seq2.nextval,'mehul');
1 row created.

SQL> insert into product values(seq2.nextval,'komal');
1 row created.

SQL> insert into product values(seq2.nextval,'karishma');
1 row created.

SQL> insert into product values(seq2.nextval,'devangi');
1 row created.

SQL> insert into product values(seq2.nextval,'kiran');
1 row created.
```

```
SQL> select * from product
  2 ;
```

PRODUCTNO	PRODUCTNAME
10	dharmit
20	mehul
30	komal
40	karishma
50	devangi
60	kiran

6 rows selected.

3. Write a sequence with maximum value is 40 and is incremented by 4, starts with 1 and forming a cycle.

```
SQL> create sequence seq3
  2 start with 1
  3 increment by 4
  4 maxvalue 40
  5 cycle
  6 cache 4;
Sequence created.
```

```
SQL> insert into q3 values(seq3.nextval,'a');
1 row created.

SQL> insert into q3 values(seq3.nextval,'b');
1 row created.

SQL> insert into q3 values(seq3.nextval,'c');
1 row created.

SQL> insert into q3 values(seq3.nextval,'d');
1 row created.

SQL> insert into q3 values(seq3.nextval,'e');
1 row created.
```

```
SQL> select * from q3;
```

NO	NAME
1	a
5	b
9	c
13	d
17	e
21	a
25	b
29	c
33	d
37	e
1	a

NO	NAME
5	b
9	c

```
13 rows selected.
```