

RDBMS FUNDAMENTALS

ASSIGNMENT 12:

Begin a transaction, perform a series of INSERTs into 'orders', setting a SAVEPOINT after each, rollback to the second SAVEPOINT, and COMMIT the overall transaction.

CREATE TABLE CUSTOMER

```
CREATE TABLE customer (  
    cid NUMBER PRIMARY KEY,  
    cname VARCHAR(20),  
    region VARCHAR(20)  
);
```

INSERT VALUES TO CUSTOMER TABLE

```
INSERT INTO customer VALUES(1, 'DEEPIKA NAIK', 'North');  
INSERT INTO customer VALUES (2, 'KIRAN NAIK', 'North');  
INSERT INTO customer VALUES (3, 'PRIYANKA', 'South');  
INSERT INTO customer VALUES (4, 'AISHWARYA', 'East');  
INSERT INTO customer VALUES (5, 'RAHUL', 'North');
```

DISPLAY CUSTOMER TABLE

```
SELECT * FROM customer;
```

CREATE TABLE ORDER

```
CREATE TABLE orders (  
    oid NUMBER PRIMARY KEY,  
    odate DATE,  
    ovalue DECIMAL(10,2),
```

```
cid NUMBER REFERENCES customers(cid)
);
```

INSERT VALUES TO ORDER TABLE

```
INSERT INTO order VALUES(101,'10-JAN-24',100.00,1),
INSERT INTO order VALUES(102,'20-MAR-24',150.00,2),
INSERT INTO order VALUES(103,'1-AUG-24',200.00,1),
INSERT INTO order VALUES(104,'25-JAN-24',50.00,3),
INSERT INTO order VALUES(105,'10-JUNE-24',300.00,4),
INSERT INTO order VALUES(106,'10-JUNE-24',300.00,5),
INSERT INTO order VALUES(107,'08-MAY-24',250.00,5),
```

DISPLAY ORDER TABLE

```
SELECT * FROM order;
```

INSERT RECORDS TO ORDER AND SET SAVEPOINT

```
INSERT INTO order VALUES(108,'08-MAY-24',100.00,1);
SAVEPOINT savepoint1;
INSERT INTO order VALUES(109,'08-MAY-24',10.00,2);
SAVEPOINT savepoint2;
```

ROLLBACK

```
ROLLBACK savepoint2;
```

COMMIT

```
COMMIT;
```

SAVEPOINT : Defines a point in a transaction to which you can later roll back.

ROLLBACK TO SAVEPOINT : Rolls back the transaction to a specified savepoint.

COMMIT : Commits the transaction, making all changes permanent

The screenshot shows the Oracle Database Express Edition interface in a Firefox browser. The SQL Commands window contains the following text:

```
select * from order1;
insert into order1 values(100,'08-MAY-2024',100.00,1);
SAVEPOINT a;
insert into order1 values(109,'08-MAY-2024',10.00,2);
SAVEPOINT b;
```

The Results window displays a table with 9 rows:

OID	ODATE	OVALUE	CID
101	10-JAN-24	100	1
102	20-MAR-24	150	2
103	01-AUG-24	200	1
104	25-JAN-24	50	3
105	10-JUN-24	300	4
106	10-JUN-24	300	5
107	08-MAY-24	250	5
108	08-MAY-24	100	1
109	08-MAY-24	10	2

9 rows returned in 0.00 seconds

The screenshot shows the Oracle Database Express Edition interface in a Firefox browser. The SQL Commands window contains the following text:

```
select * from order1;
insert into order1 values(100,'08-MAY-2024',100.00,1);
SAVEPOINT a;
insert into order1 values(109,'08-MAY-2024',10.00,2);
SAVEPOINT b;
rollback
```

The Results window displays a table with 8 rows:

OID	ODATE	OVALUE	CID
101	10-JAN-24	100	1
102	20-MAR-24	150	2
103	01-AUG-24	200	1
104	25-JAN-24	50	3
105	10-JUN-24	300	4
106	10-JUN-24	300	5
107	08-MAY-24	250	5
108	08-MAY-24	100	1

8 rows returned in 0.00 seconds