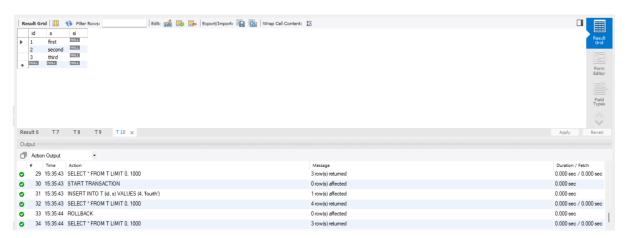
System Security Lab-2

Praneesh R V

CB.SC.U4CYS23036

Exercise 1.1

```
Query 1
        | 🗲 f 👰 🕛 | 🚯 | 💿 🔞 | Limit to 1000 rows
                                                        - | 🚖 | 🥩 🔍 🗻 🖃
  1 •
         CREATE TABLE T (id INT NOT NULL PRIMARY KEY, s VARCHAR(40), si SMALLINT);
  2 •
         DESCRIBE T;
         INSERT INTO T (id, s) VALUES (1, 'first');
         INSERT INTO T (id, s) VALUES (2, 'second');
  5 •
         INSERT INTO T (id, s) VALUES (3, 'third');
         SELECT * FROM T ;
  6 •
  7 •
         ROLLBACK;
  8 •
         SELECT * FROM T ;
  9 •
         START TRANSACTION;
         INSERT INTO T (id, s) VALUES (4, 'fourth');
 10 •
         SELECT * FROM T ;
 12 •
         ROLLBACK;
 13 •
         SELECT * FROM T;
 14
```



Exercise 1.2

```
Query 1 ×

Image: Query 1 ×

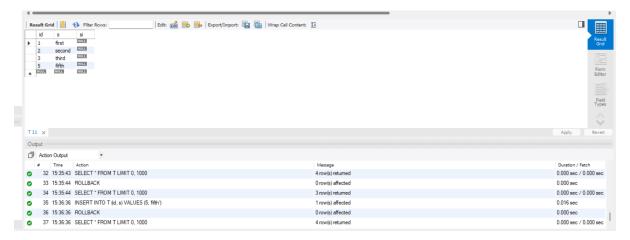
Image: Query 1 ×

Instraction T (id, s) VALUES (5, 'fifth');

ROLLBACK;

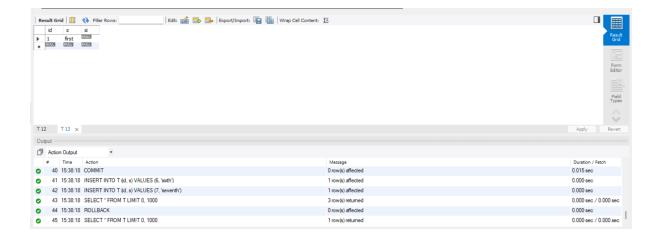
SELECT * FROM T;
```

Output:



Exercise 1.3

```
Query 1
       | 🗲 🔐 👰 🕛 | 😘 | 🔘 🚳
                                                        - | 🏡 | 🥩 🔍 🗻 🖃
                                    Limit to 1000 rows
         SET AUTOCOMMIT = 0;
  1 •
         DELETE FROM T WHERE id > 1;
  2 •
  3 •
         COMMIT;
  4 •
        INSERT INTO T (id, s) VALUES (6, 'sixth');
  5 •
         INSERT INTO T (id, s) VALUES (7, 'seventh');
  6 •
         SELECT * FROM T;
         ROLLBACK;
  7 •
  8 •
         SELECT * FROM T;
  9
```



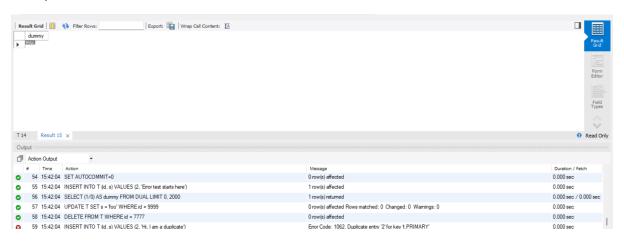
Exercise 1.4

```
🚞 🔚 | 🐓 🙀 👰 🔘 | 🔂 | 📀 🔕 🔞 | Limit to 2000 rows 🕝 埃 | 🥩 🔍 👖 🖘
       SET AUTOCOMMIT=0;
       DELETE FROM T WHERE id > 1;
 3
       DROP TABLE T2; --
       COMMIT;
 4
 5 • SET AUTOCOMMIT=0;
 6 •
      INSERT INTO T (id, s) VALUES (9, 'will this be committed?');
 7 •
      CREATE TABLE T2 (id INT);
      INSERT INTO T2 (id) VALUES (1);
 9 •
      SELECT * FROM T2;
10 •
     ROLLBACK;
11 •
      SELECT * FROM T; -- What has happened to T?
12 •
     SELECT * FROM T2; -- What has happened to T2 ?
      SELECT * FROM T3; -- assuming that we have not created table T3
13 •
14 •
      SHOW TABLES;
      DROP TABLE T2;
15 •
      COMMIT;
16 •
17
```

_										
Out	Output									
	Action	n Output	tput ▼							
	#	Time	Action	Message						
0	43	15:38:18	SELECT * FROM T LIMIT 0, 1000	3 row(s) returned						
0	44	15:38:18	ROLLBACK	0 row(s) affected						
•	45	15:38:18	SELECT * FROM T LIMIT 0, 1000	1 row(s) returned						
0	46	15:40:37	SET AUTOCOMMIT=0	0 row(s) affected						
•	47	15:40:37	DELETE FROM T WHERE id > 1	0 row(s) affected						
8	48	15:40:37	DROP TABLE T2	Error Code: 1051. Unknown table 'cbscu4cys23036.t2'						

Exercise 1.5

```
Query 1 ×
                                                         • | 🏂 | 🥩 🔍 🗻 🗊
🚞 🔒 | 💅 🚀 👰 🕛 | 🚱 | 💿 🔞 | Limit to 2000 rows
        SET AUTOCOMMIT=0;
  2
        DELETE FROM T WHERE id > 1;
  3
        COMMIT;
        SELECT * FROM T;
  4
  5
        COMMIT;
        SET AUTOCOMMIT=0;
  6 •
  7 •
        INSERT INTO T (id, s) VALUES (2, 'Error test starts here');
        SELECT (1/0) AS dummy FROM DUAL;
  8 •
  9 •
        UPDATE T SET s = 'foo' WHERE id = 9999 ;
        DELETE FROM T WHERE id = 7777 ;
 10 •
        INSERT INTO T (id, s) VALUES (2, 'Hi, I am a duplicate');
 11 •
 12 •
        INSERT INTO T (id, s)
         VALUES (3, 'How about inserting too long of a string value?');
 13
        INSERT INTO T (id, s, si) VALUES (4, 'Smallint overflow for 32769?', 32769);
 14 •
 15 •
        SHOW ERRORS;
 16 •
        SHOW WARNINGS;
 17 •
        INSERT INTO T (id, s) VALUES (5, 'Is the transaction still active?');
 18 •
        SELECT * FROM T;
 19 •
        COMMIT;
 20 •
        DELETE FROM T WHERE id > 1;
 21 •
        SELECT * FROM T;
 22 •
        COMMIT;
```



Exercise 1.6

```
🚞 🔚 | 🦩 🖟 👰 🕛 | 🚱 | 💿 🔞 | 🐻 | Limit to 2000 rows 🔻 | 🏡 | 🥩 🔍 🗻 🖘
 1 • DROP TABLE Accounts;
       SET AUTOCOMMIT=0;
 3 ● ⊖ CREATE TABLE Accounts (
       acctID INTEGER NOT NULL PRIMARY KEY,
       balance INTEGER NOT NULL CONSTRAINT unloanable_account CHECK (balance >= 0)
     );
 6
 7 • CREATE TABLE Accounts (
       acctID INTEGER NOT NULL PRIMARY KEY,
       balance INTEGER NOT NULL ,
       CONSTRAINT unloanable_account CHECK (balance >= 0)
10
     ) ENGINE = InnoDB;
      INSERT INTO Accounts (acctID, balance) VALUES (100,-1000);
12 .
13 •
      SELECT * FROM Accounts;
14 •
     ROLLBACK;
15 • SET AUTOCOMMIT=0;
       INSERT INTO Accounts (acctID, balance) VALUES (101, 1000);
16 •
       INSERT INTO Accounts (acctID, balance) VALUES (202, 2000);
17 •
       SELECT * FROM Accounts;
18 •
19 •
       COMMIT;
       UPDATE Accounts SET balance = balance - 100 WHERE acctID = 101;
20 .
     UPDATE Accounts SET balance = balance + 100 WHERE acctID = 202;
22 .
       SELECT * FROM Accounts;
23 •
       ROLLBACK;
       UPDATE Accounts SET balance = balance - 2000 WHERE acctID = 101;
24 •
25 .
       UPDATE Accounts SET balance = balance + 2000 WHERE acctID = 202;
      SELECT * FROM Accounts;
26 •
27 •
       ROLLBACK;
28 •
       UPDATE Accounts SET balance = balance - 500 WHERE acctID = 101;
     UPDATE Accounts SET balance = balance + 500 WHERE acctID = 777;
30 • SELECT * FROM Accounts ;
31 •
       ROLLBACK;
```

Out	- Dupus								
đ	☐ Action Output ▼								
	# Tir	ime	Action	Message	Duration / Fetch				
•	55 15	5:42:04	INSERT INTO T (id, s) VALUES (2, 'Error test starts here')	1 row(s) affected	0.000 sec				
0	56 15	5:42:04	SELECT (1/0) AS dummy FROM DUAL LIMIT 0, 2000	1 row(s) returned	0.000 sec / 0.000 sec				
0	57 15	5:42:04	UPDATE T SET's = foo' WHERE id = 9999	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.000 sec				
0	58 15	5:42:04	DELETE FROM T WHERE id = 7777	0 row(s) affected	0.000 sec				
8	59 15	5:42:04	INSERT INTO T (id. s) VALUES (2, "Hi, I am a duplicate")	Error Code: 1062. Duplicate entry '2' for key 't.PRIMARY'	0.000 sec				
8	60 15	5:43:33	DROP TABLE Accounts	Error Code: 1051. Unknown table 'cbscu4cys23036.accounts'	0.016 sec				

Exercise 1.7

