Practical 2

Enter password: ****** Welcome to the MySQL monitor. Commands end with; or \g. Your MySQL connection id is 10 Server version: 9.2.0 MySQL Community Server - GPL Copyright (c) 2000, 2025, Oracle and/or its affiliates. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. Type 'help;' or '\h' for help. Type '\c' to clear the current input statement. mysql> create database bank; Query OK, 1 row affected (0.02 sec) mysql> use bank; Database changed mysql> CREATE TABLE customer -> (-> customer_id INT NOT NULL, -> name INT NOT NULL, -> address INT NOT NULL, -> contactno INT NOT NULL, -> email_id INT NOT NULL, -> PRIMARY KEY (customer_id)

```
->);
Query OK, 0 rows affected (0.05 sec)
mysql>
mysql> CREATE TABLE transaction
 -> (
 -> transaction_id INT NOT NULL,
 -> transaction_type INT NOT NULL,
 -> transaction_date INT NOT NULL,
 -> transaction_time INT NOT NULL,
 -> PRIMARY KEY (transaction_id)
 ->);
Query OK, 0 rows affected (0.02 sec)
mysql>
mysql> CREATE TABLE employee
 -> (
 -> name INT NOT NULL,
 -> id INT NOT NULL,
 -> branch INT NOT NULL,
 -> transaction_id INT NOT NULL,
 -> customer_id INT NOT NULL,
 -> PRIMARY KEY (name),
 -> FOREIGN KEY (transaction_id) REFERENCES transaction(transaction_id),
 -> FOREIGN KEY (customer_id) REFERENCES customer(customer_id)
 ->);
Query OK, 0 rows affected (0.07 sec)
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mysql>
mysql> CREATE TABLE account
 -> (
 -> account_no INT NOT NULL,
 -> account_type INT NOT NULL,
 -> balance INT NOT NULL,
 -> account_id INT NOT NULL,
 -> customer_id INT NOT NULL,
 -> transaction_id INT NOT NULL,
 -> PRIMARY KEY (account_no),
 -> FOREIGN KEY (customer_id) REFERENCES customer(customer_id),
 -> FOREIGN KEY (transaction_id) REFERENCES transaction(transaction_id)
 ->);
Query OK, 0 rows affected (0.05 sec)
mysql> show tables;
+----+
| Tables_in_bank |
+----+
account
| customer |
| employee
|transaction |
+----+
4 rows in set (0.02 sec)
mysql> desc account;
+----+
```

```
| Field | Type | Null | Key | Default | Extra |
+----+
|account_no |int |NO |PRI|NULL | |
|account_type |int |NO | |NULL | |
| balance
       |int | NO | | NULL | | |
|account_id |int |NO | |NULL | |
|customer_id |int |NO |MUL|NULL |
|transaction_id|int|NO|MUL|NULL|
+----+
6 rows in set (0.01 sec)
mysql> desc customer;
+----+
| Field | Type | Null | Key | Default | Extra |
+----+
|customer_id|int|NO|PRI|NULL|
     |int | NO | | NULL | |
| name
|address |int |NO | |NULL | |
|contactno |int |NO | |NULL | |
|email_id |int | NO | | NULL | |
+-----+
5 rows in set (0.00 sec)
mysql> desc employee;
+----+
      | Type | Null | Key | Default | Extra |
|name |int | NO | PRI | NULL | |
```

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| id
   |int |NO | |NULL | | |
|branch |int |NO | |NULL | |
|transaction_id|int|NO|MUL|NULL|
|customer_id |int |NO |MUL|NULL |
+-----+
5 rows in set (0.00 sec)
mysql> desc transaction;
+-----+
| Field | Type | Null | Key | Default | Extra |
+----+
|transaction_id |int | NO | PRI | NULL | |
|transaction_type|int|NO||NULL||
|transaction_date|int|NO||NULL||
|transaction_time|int|NO||NULL|
+----+
4 rows in set (0.00 sec)
mysql> create user 'amit'@localhost identified by 'amit';
Query OK, 0 rows affected (0.04 sec)
mysql> grant select on bank.account to 'amit'@localhost;
Query OK, 0 rows affected (0.00 sec)
mysql> create user 'manager'@localhost identified by 'manager';
Query OK, 0 rows affected (0.01 sec)
```

mysql> grant all privileges on bank.* to 'manager'@localhost;

```
mysql> desc customer;
+----+
| Field | Type | Null | Key | Default | Extra |
+-----+
|customer_id|int|NO|PRI|NULL| |
|name |int | NO | | NULL | |
|address |int |NO | |NULL | |
|contactno |int |NO | |NULL | |
|email_id |int | NO | | NULL | |
+-----+
5 rows in set (0.00 sec)
mysql> alter table customer add email varchar(20);
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> desc customer;
+-----+
| Field | Type | Null | Key | Default | Extra |
+----+
|customer_id|int |NO |PRI|NULL | |
|name |int |NO | |NULL | |
|address |int |NO | NULL | |
|contactno |int |NO | |NULL | |
|email_id |int |NO | |NULL | |
email varchar(20) YES | NULL | |
```

+----+

6 rows in set (0.00 sec)