**Ex No. 2Write a Program to do Data Partitioning in a Database**

CREATE DATABASE IF NOT EXISTS partitioning\_example;

Query OK, 1 row affected, 1 warning (0.00 sec)

mysql> USE partitioning\_example;

Database changed

mysql>

mysql> CREATE TABLE IF NOT EXISTS partitioned\_data (

id INT AUTO\_INCREMENT PRIMARY KEY,

description VARCHAR(255),

amount DECIMAL(10, 2),

transaction\_date DATE)

-> PARTITION BY RANGE (YEAR(transaction\_date)) (

-> PARTITION p0 VALUES LESS THAN (2020),

-> PARTITION p1 VALUES LESS THAN (2021),

-> PARTITION p2 VALUES LESS THAN (2022),

-> PARTITION p3 VALUES LESS THAN MAXVALUE

-> );

Query OK, 0 rows affected, 1 warning (0.01 sec)

mysql> INSERT INTO partitioned\_data (description, amount, transaction\_date) VALUES

-> ('Initial deposit', 1000.00, '2020-01-01'),

-> ('Purchase of goods', -500.50, '2021-03-15'),

-> ('Salary credit', 1500.00, '2022-05-20');

Query OK, 3 rows affected (0.00 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM partitioned\_data;

+----+-------------------+---------+------------------+

| id | description | amount | transaction\_date |

+----+-------------------+---------+------------------+

| 1 | Initial deposit | 1000.00 | 2020-01-01 |

| 2 | Purchase of goods | -500.50 | 2021-03-15 |

| 3 | Salary credit | 1500.00 | 2022-05-20 |

+----+-------------------+---------+------------------+

3 rows in set (0.00 sec)

SELECT \* FROM partitioned\_data WHERE YEAR(transaction\_date) < 2020;

Empty set (0.00 sec)

mysql> SELECT \* FROM partitioned\_data WHERE YEAR(transaction\_date) > 2020;

+----+-------------------+---------+------------------+

| id | description | amount | transaction\_date |

+----+-------------------+---------+------------------+

| 2 | Purchase of goods | -500.50 | 2021-03-15 |

| 3 | Salary credit | 1500.00 | 2022-05-20 |

+----+-------------------+---------+------------------+

2 rows in set (0.00 sec)