mysql> create table books(Book\_id int primary key, Tittle varchar(30), author\_id int, foreign key (author\_id) references

Authors(author\_id));

Query OK, 0 rows affected (0.05 sec)

mysql> desc books;

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

| Field | Type | Null | Key | Default | Extra |

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

| Book\_id | int | NO | PRI | NULL | |

| Tittle | varchar(30) | YES | | NULL | |

| author\_id | int | YES | MUL | NULL | |

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

3 rows in set (0.01 sec)

mysql> desc authors;

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

| Field | Type | Null | Key | Default | Extra |

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

| author\_id | int | NO | PRI | NULL | |

| Name | varchar(30) | YES | | NULL | |

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

2 rows in set (0.01 sec)

mysql> insert into authors values(101, "P.N Petter");

Query OK, 1 row affected (0.01 sec)

mysql> insert into authors values(102, "A.Gupta");

Query OK, 1 row affected (0.01 sec)

mysql> insert into authors values(102, "A.Gupta");

ERROR 1062 (23000): Duplicate entry '102' for key 'authors.PRIMARY'

mysql> insert into authors values(103, "Asha Shah");

Query OK, 1 row affected (0.01 sec)

mysql> insert into books values(1, "Managment", 101);

Query OK, 1 row affected (0.01 sec)

mysql> insert into books values(2, "Managment", 102);

Query OK, 1 row affected (0.01 sec)

mysql> insert into books values(2, "Managment", 103);

ERROR 1062 (23000): Duplicate entry '2' for key 'books.PRIMARY'

mysql> insert into books values(3, "Managment", 103);

Query OK, 1 row affected (0.01 sec)

mysql> insert into books values(4, "Og", 101);

Query OK, 1 row affected (0.01 sec)

mysql> insert into books values(5, "MAths", 103);

Query OK, 1 row affected (0.01 sec)

mysql> insert into books values(6, "MAths", 104);

ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`practices`.`books`, CONSTRAINT `books\_ibfk\_1` FOREIGN KEY (`author\_id`) REFERENCES `authors` (`author\_id`))

mysql> select \* from authors;

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

| author\_id | Name |

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

| 101 | P.N Petter |

| 102 | A.Gupta |

| 103 | Asha Shah |

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

3 rows in set (0.00 sec)

mysql> select \* from books;

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

| Book\_id | Tittle | author\_id |

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

| 1 | Managment | 101 |

| 2 | Managment | 102 |

| 3 | Managment | 103 |

| 4 | Og | 101 |

| 5 | MAths | 103 |

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

5 rows in set (0.00 sec)

mysql> create table customers(Customer\_id int primary key, name varchar(30));

Query OK, 0 rows affected (0.04 sec)

mysql> create table orders(order\_id int primary key, order\_date date, customer\_id int, foreign key(customer\_id) referenc

es customers(customer\_id));

Query OK, 0 rows affected (0.04 sec)

mysql> desc customers;

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

| Field | Type | Null | Key | Default | Extra |

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

| Customer\_id | int | NO | PRI | NULL | |

| name | varchar(30) | YES | | NULL | |

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

2 rows in set (0.01 sec)

mysql> desc orders;

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

| Field | Type | Null | Key | Default | Extra |

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

| order\_id | int | NO | PRI | NULL | |

| order\_date | date | YES | | NULL | |

| customer\_id | int | YES | MUL | NULL | |

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

3 rows in set (0.00 sec)

mysql> insert into cutomers(Customer\_id, name)values(1, "Rehan"),(2,"Hemant"),(3, "Uma shankar"),(4, "Rohit");

ERROR 1146 (42S02): Table 'practices.cutomers' doesn't exist

mysql> insert into customers(Customer\_id, name)values(1, "Rehan"),(2,"Hemant"),(3, "Uma shankar"),(4, "Rohit");

Query OK, 4 rows affected (0.01 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> insert into orders(order\_id, order\_date, customer\_id)values(101, "06-12-2024",1),(102, "06-12-2024", 3), (103,"06

-12-2024", 4);

ERROR 1292 (22007): Incorrect date value: '06-12-2024' for column 'order\_date' at row 1

mysql> insert into orders(order\_id, order\_date, customer\_id)values(101, "2024-12-06",1),(102, "2024-12-06", 3), (103,"2024-12-06", 4);

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select \* from orders;

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

| order\_id | order\_date | customer\_id |

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

| 101 | 2024-12-06 | 1 |

| 102 | 2024-12-06 | 3 |

| 103 | 2024-12-06 | 4 |

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

3 rows in set (0.00 sec)

mysql> select \* from customers;

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

| Customer\_id | name |

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

| 1 | Rehan |

| 2 | Hemant |

| 3 | Uma shankar |

| 4 | Rohit |

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

4 rows in set (0.00 sec)

mysql> delete from orders customer\_id;

Query OK, 3 rows affected (0.01 sec)

mysql> select \* from orders;

Empty set (0.00 sec)

mysql> select \* from orders;

Empty set (0.00 sec)

mysql> select \* from cutomers;

ERROR 1146 (42S02): Table 'practices.cutomers' doesn't exist

mysql> select \* from customers;

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

| Customer\_id | name |

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

| 1 | Rehan |

| 2 | Hemant |

| 3 | Uma shankar |

| 4 | Rohit |

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

4 rows in set (0.00 sec)

mysql> select \* from orders;

Empty set (0.00 sec)

mysql> insert into orders(order\_id, order\_date, customer\_id)values(101, "2024-12-06",1),(102, "2024-12-06", 3), (103,"2024-12-06", 4);

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> create table categories(category\_id int primary key, category\_name varchar(30));

Query OK, 0 rows affected (0.04 sec)

mysql> create table product(Product\_id int primary key, product\_name varchar(30), Primary\_category\_id int, foreign key(Primary\_category\_id) references categories(category\_id), Secondary\_category\_id int, foreign key(Secondary\_category\_id) re

ferences categories(category\_id));

Query OK, 0 rows affected (0.05 sec)

mysql> desc categories;

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

| Field | Type | Null | Key | Default | Extra |

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

| category\_id | int | NO | PRI | NULL | |

| category\_name | varchar(30) | YES | | NULL | |

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

2 rows in set (0.01 sec)

mysql> desc product;

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

| Field | Type | Null | Key | Default | Extra |

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

| Product\_id | int | NO | PRI | NULL | |

| product\_name | varchar(30) | YES | | NULL | |

| Primary\_category\_id | int | YES | MUL | NULL | |

| Secondary\_category\_id | int | YES | MUL | NULL | |

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

4 rows in set (0.01 sec)

mysql> insert into categories(category\_id, Category\_name)values(101, "Funiture"), (102, "Electro"), (102, "A/c technices");

ERROR 1062 (23000): Duplicate entry '102' for key 'categories.PRIMARY'

mysql> insert into categories(category\_id, Category\_name)values(101, "Funiture"), (102, "Electro"), (103, "A/c technices

");

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> insert into product(product\_id, Product\_name, Primary\_category\_id, Secondary\_category\_id)values(1, "Fans", 102, 1

02);

Query OK, 1 row affected (0.01 sec)

mysql> insert into product(product\_id, Product\_name, Primary\_category\_id, Secondary\_category\_id)values(1, "Fans", 102, 103);

ERROR 1062 (23000): Duplicate entry '1' for key 'product.PRIMARY'

mysql> insert into product(product\_id, Product\_name, Primary\_category\_id, Secondary\_category\_id)values(2, "Fans", 102, 1

03);

Query OK, 1 row affected (0.01 sec)

mysql> insert into product(product\_id, Product\_name, Primary\_category\_id, Secondary\_category\_id)values(3, "Ac", 102, 103

);

Query OK, 1 row affected (0.04 sec)

mysql> insert into product(product\_id, Product\_name, Primary\_category\_id, Secondary\_category\_id)values(4, "Chair", 101,

101);

Query OK, 1 row affected (0.01 sec)

mysql> select \* from categories;

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

| category\_id | category\_name |

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

| 101 | Funiture |

| 102 | Electro |

| 103 | A/c technices |

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

3 rows in set (0.00 sec)

mysql> select \* from product;

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

| Product\_id | product\_name | Primary\_category\_id | Secondary\_category\_id |

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

| 1 | Fans | 102 | 102 |

| 2 | Fans | 102 | 103 |

| 3 | Ac | 102 | 103 |

| 4 | Chair | 101 | 101 |

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

4 rows in set (0.00 sec)