**Name :Vishal singh**

**Subject:DBMS**

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**SLIP\_6.**

MariaDB [slip\_6]> create table book(b\_no int primary key,name varchar(10),pub\_name varchar(10));

Query OK, 0 rows affected (0.325 sec)

MariaDB [slip\_6]> create table author(a\_no int primary key,a\_name varchar(10) not null);

Query OK, 0 rows affected (0.315 sec)

MariaDB [slip\_6]> create table auth\_book(a\_no int,foreign key(a\_no) references author(a\_no),b\_no int,foreign key(b\_no) references book(b\_no));

Query OK, 0 rows affected (0.232 sec)

MariaDB [slip\_6]> desc book;

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

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

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

| b\_no | int(11) | NO | PRI | NULL | |

| name | varchar(10) | YES | | NULL | |

| pub\_name | varchar(10) | YES | | NULL | |

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

3 rows in set (0.014 sec)

MariaDB [slip\_6]> insert into book values(1001,'java prog','phi');

Query OK, 1 row affected (0.067 sec)

MariaDB [slip\_6]> insert into book values(1002,'C prog','phi');

Query OK, 1 row affected (0.051 sec)

MariaDB [slip\_6]> insert into book values(1003,'C++ prog','nirali');

Query OK, 1 row affected (0.044 sec)

MariaDB [slip\_6]> select \* from book;

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

| b\_no | name | pub\_name |

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

| 1001 | java prog | phi |

| 1002 | C prog | phi |

| 1003 | C++ prog | nirali |

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

3 rows in set (0.001 sec)

MariaDB [slip\_6]> desc author;

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

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

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

| a\_no | int(11) | NO | PRI | NULL | |

| a\_name | varchar(10) | NO | | NULL | |

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

2 rows in set (0.085 sec)

MariaDB [slip\_6]> insert into author values(501,'vishal');

Query OK, 1 row affected (0.099 sec)

MariaDB [slip\_6]> insert into author values(502,'singh');

Query OK, 1 row affected (0.097 sec)

MariaDB [slip\_6]> insert into author values(503,'karan');

Query OK, 1 row affected (0.060 sec)

MariaDB [slip\_6]> desc auth\_book;

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

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

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

| a\_no | int(11) | YES | MUL | NULL | |

| b\_no | int(11) | YES | MUL | NULL | |

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

2 rows in set (0.017 sec)

MariaDB [slip\_6]> select \* from book;

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

| b\_no | name | pub\_name |

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

| 1001 | java prog | phi |

| 1002 | C prog | phi |

| 1003 | C++ prog | nirali |

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

3 rows in set (0.000 sec)

MariaDB [slip\_6]> select \* from author;

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

| a\_no | a\_name |

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

| 501 | vishal |

| 502 | singh |

| 503 | karan |

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

3 rows in set (0.001 sec)

MariaDB [slip\_6]> insert into auth\_book values(1001,501);

ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`slip\_6`.`auth\_book`, CONSTRAINT `auth\_book\_ibfk\_1` FOREIGN KEY (`a\_no`) REFERENCES `author` (`a\_no`))

MariaDB [slip\_6]> desc auth\_book;

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

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

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

| a\_no | int(11) | YES | MUL | NULL | |

| b\_no | int(11) | YES | MUL | NULL | |

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

2 rows in set (0.038 sec)

MariaDB [slip\_6]> insert into auth\_book values(501,1001);

Query OK, 1 row affected (0.070 sec)

MariaDB [slip\_6]> insert into auth\_book values(501,1002);

Query OK, 1 row affected (0.045 sec)

MariaDB [slip\_6]> insert into auth\_book values(502,1003);

Query OK, 1 row affected (0.059 sec)

MariaDB [slip\_6]> insert into auth\_book values(502,1001);

Query OK, 1 row affected (0.044 sec)

MariaDB [slip\_6]> insert into auth\_book values(503,1003);

Query OK, 1 row affected (0.070 sec)

MariaDB [slip\_6]> insert into auth\_book values(503,1001);

Query OK, 1 row affected (0.065 sec)

MariaDB [slip\_6]> select \* from auth\_book;

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

| a\_no | b\_no |

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

| 501 | 1001 |

| 501 | 1002 |

| 502 | 1003 |

| 502 | 1001 |

| 503 | 1003 |

| 503 | 1001 |

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

6 rows in set (0.000 sec)

MariaDB [slip\_6]> Microsoft Windows [Version 10.0.22000.1219]

(c) Microsoft Corporation. All rights reserved.

C:\Users\91937>mysql -uroot

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 24

Server version: 10.4.24-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> use slip\_6;

Database changed

MariaDB [slip\_6]> show tables;

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

| Tables\_in\_slip\_6 |

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

| auth\_book |

| author |

| book |

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

3 rows in set (0.001 sec)

MariaDB [slip\_6]> select \* from author;

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

| a\_no | a\_name |

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

| 501 | vishal |

| 502 | singh |

| 503 | karan |

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

3 rows in set (0.134 sec)

MariaDB [slip\_6]> select \* from book;

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

| b\_no | name | pub\_name |

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

| 1001 | java prog | phi |

| 1002 | C prog | phi |

| 1003 | C++ prog | nirali |

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

3 rows in set (0.095 sec)

MariaDB [slip\_6]> select \* from auth\_book;

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

| a\_no | b\_no |

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

| 501 | 1001 |

| 501 | 1002 |

| 502 | 1003 |

| 502 | 1001 |

| 503 | 1003 |

| 503 | 1001 |

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

6 rows in set (0.075 sec)

MariaDB [slip\_6]> select \* from author,book,auth\_book where book.pub\_name='phi' and book.b\_no=auth\_book.b\_no and auth\_book.a\_no=author.a\_no group by a\_no having count(a\_no);

ERROR 1052 (23000): Column 'a\_no' in group statement is ambiguous

MariaDB [slip\_6]> select \* from author,book,auth\_book where book.pub\_name='phi' and book.b\_no=auth\_book.b\_no and auth\_book.a\_no=author.a\_no group by author.a\_no having count(author.a\_no);

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

| a\_no | a\_name | b\_no | name | pub\_name | a\_no | b\_no |

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

| 501 | vishal | 1001 | java prog | phi | 501 | 1001 |

| 502 | singh | 1001 | java prog | phi | 502 | 1001 |

| 503 | karan | 1001 | java prog | phi | 503 | 1001 |

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

3 rows in set (0.002 sec)

MariaDB [slip\_6]> select count(b\_no) from book group by pub\_name;

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

| count(b\_no) |

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

| 1 |

| 2 |

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

2 rows in set (0.001 sec)

MariaDB [slip\_6]> select book.b\_no,book.name,book.pub\_name from book,author,auth\_book where author.a\_no=auth\_book.a\_no and book.b\_no=auth\_book.b\_no and author.a\_name='karan';

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

| b\_no | name | pub\_name |

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

| 1003 | C++ prog | nirali |

| 1001 | java prog | phi |

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

2 rows in set (0.001 sec)

MariaDB [slip\_6]> select book.name,book.pub\_name from book group by book.name;

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

| name | pub\_name |

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

| C prog | phi |

| C++ prog | nirali |

| java prog | phi |

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

3 rows in set (0.001 sec)

MariaDB [slip\_6]>