

## Assignment-8

### Mid2

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Batch-A (1, 2)

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Flights (flno,frm,too,distance,departs,arrives,price)

Aircraft (aid,aname,cruisingrange)

Certified (eid,aid)

Employee (eid,ename,salary)

#### Create Tables:

```
MariaDB [(none)]> use mid2;
Database changed
MariaDB [mid2]> CREATE TABLE flights
-> (
-> flno INT,
-> frm VARCHAR(20),
-> too VARCHAR(20),
-> distance INT,
-> departs VARCHAR(20),
-> arrives VARCHAR(20),
-> price INT,
-> PRIMARY KEY (flno) );
Query OK, 0 rows affected (0.27 sec)
```

```
MariaDB [mid2]> CREATE TABLE aircraft
-> (
-> aid INT,
-> aname VARCHAR(20),
-> cruisingrange INT,
-> PRIMARY KEY (aid));
Query OK, 0 rows affected (0.28 sec)
```

```

MariaDB [mid2]> CREATE TABLE employee
-> (
-> eid INT,
-> ename VARCHAR(20),
-> salary INT,
-> PRIMARY KEY (eid));
Query OK, 0 rows affected (0.26 sec)

```

```

MariaDB [mid2]> CREATE TABLE certified
-> (
-> eid INT,
-> aid INT,
-> PRIMARY KEY (eid,aid),
-> FOREIGN KEY (eid) REFERENCES employee (eid),
-> FOREIGN KEY (aid) REFERENCES aircraft (aid));
Query OK, 0 rows affected (0.22 sec)

```

### Insert values into table:

```

MariaDB [mid2]> INSERT INTO flights (flno,frm,too,distance,departs,arrives,price) values
-> (1,'jaipur','kolkata',3900,'10:50:00','12:05:00',20000),
-> (2,'jaipur','Delhi',300,'12:20:00','04:35:00',5000),
-> (3,'jaipur','Mumbai',2600,'02:30:00','05:30:00',12900),
-> (4,'Delhi','Mumbai',3000,'10:20:00','12:10:00',8000),
-> (5,'Delhi','goa',4000,'07:20:00','05:35:00',20000),
-> (6,'jaipur','goa',4500,'10:05:00','07:50:00',25000),
-> (7,'punjab','goa',6000,'12:05:00','06:35:00',30000);
Query OK, 7 rows affected (0.18 sec)
Records: 7 Duplicates: 0 Warnings: 0

```

```

MariaDB [mid2]> INSERT INTO aircraft (aid,aname,cruisingrange) values
-> (321,'Aircraft2',1100),
-> (203,'Boeing',5000),
-> (603,'MSD007',5000),
-> (873,'Airbus',8000),
-> (654,'Aircraft1',500),
-> (987,'INS_VIKRANT',800),
-> (159,'Aircraft3',1000);
Query OK, 7 rows affected (0.07 sec)
Records: 7 Duplicates: 0 Warnings: 0

```

```
MariaDB [mid2]> INSERT INTO employee (eid,ename,salary) values
-> (1,'Ajay',35000),
-> (2,'Ashish',90000),
-> (3,'Amit',55000),
-> (4,'Harish',50000),
-> (5,'Rohit',95000),
-> (6,'Jatin',80000),
-> (7,'Rahul',110000),
-> (8,'abhishek',40000),
-> (9,'swaraj',11000),
-> (10,'ankur',80000);
Query OK, 10 rows affected (0.08 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

```
MariaDB [mid2]> INSERT INTO certified (eid,aid) values
-> (1,321),
-> (2,321),
-> (1,203),
-> (5,203),
-> (7,203),
-> (6,654),
-> (3,654),
-> (5,987),
-> (6,987),
-> (3,159),
-> (1,159),
-> (1,987),
-> (1,603),
-> (2,603),
-> (1,873),
-> (2,873),
-> (4,873);
Query OK, 17 rows affected (0.15 sec)
Records: 17  Duplicates: 0  Warnings: 0
```

Show tables:

```
MariaDB [mid2]> select * from flights;
```

flno	frm	too	distance	departs	arrives	price
1	jaipur	kolkata	3900	10:50:00	12:05:00	20000
2	jaipur	Delhi	300	12:20:00	04:35:00	5000
3	jaipur	Mumbai	2600	02:30:00	05:30:00	12900
4	Delhi	Mumbai	3000	10:20:00	12:10:00	8000
5	Delhi	goa	4000	07:20:00	05:35:00	20000
6	jaipur	goa	4500	10:05:00	07:50:00	25000
7	punjab	goa	6000	12:05:00	06:35:00	30000

```
7 rows in set (0.00 sec)
```

```
MariaDB [mid2]> select * from aircraft;
```

aid	aname	cruisingrange
159	Aircraft3	1000
203	Boeing	5000
321	Aircraft2	1100
603	MSD007	5000
654	Aircraft1	500
873	Airbus	8000
987	INS_VIKRANT	800

```
7 rows in set (0.00 sec)
```

```
MariaDB [mid2]> select * from certified;
```

eid	aid
1	159
1	203
1	321
1	603
1	873
1	987
2	321
2	603
2	873
3	159
3	654
4	873
5	203
5	987
6	654
6	987
7	203

```
17 rows in set (0.00 sec)
```

```
MariaDB [mid2]> select * from employee;
```

eid	ename	salary
1	Ajay	35000
2	Ashish	90000
3	Amit	55000
4	Harish	50000
5	Rohit	95000
6	Jatin	80000
7	Rahul	110000
8	abhishek	40000
9	swaraj	11000
10	ankur	80000

```
10 rows in set (0.00 sec)
```

## Queries:

1-find the names of pilots certified for some Boeing aircraft.

```
MariaDB [mid2]> select ename from employee inner join certified on  
-> employee.eid=certified.eid inner join aircraft on  
-> certified.aid=aircraft.aid  
-> where aircraft.aname='Boeing';
```

ename
Ajay
Rohit
Rahul

```
3 rows in set (0.00 sec)
```

2-print name and salary of every non pilot whose salary is more than average salary of pilots.

```
MariaDB [mid2]> select distinct ename,salary from employee,certified
-> where employee.eid not in
-> (select eid from certified)
-> and
-> employee.salary>
-> (select avg(distinct salary) from employee inner join
-> certified on employee.eid=certified.eid);
+-----+-----+
| ename | salary |
+-----+-----+
| ankur | 80000  |
+-----+-----+
1 row in set (0.00 sec)
```

3-print names of employees who are certified only on aircrafts with cruisingrange longer than 1000 miles, but on at least 2 such aircrafts.

```
MariaDB [mid2]> select e1.ename from employee e1,certified c1,
-> aircraft a1 where c1.eid=e1.eid and c1.aid=a1.aid
-> and a1.cruisingrange>1000
-> group by ename having count(ename)>1;
+-----+
| ename |
+-----+
| Ajay  |
| Ashish|
+-----+
2 rows in set (0.03 sec)
```