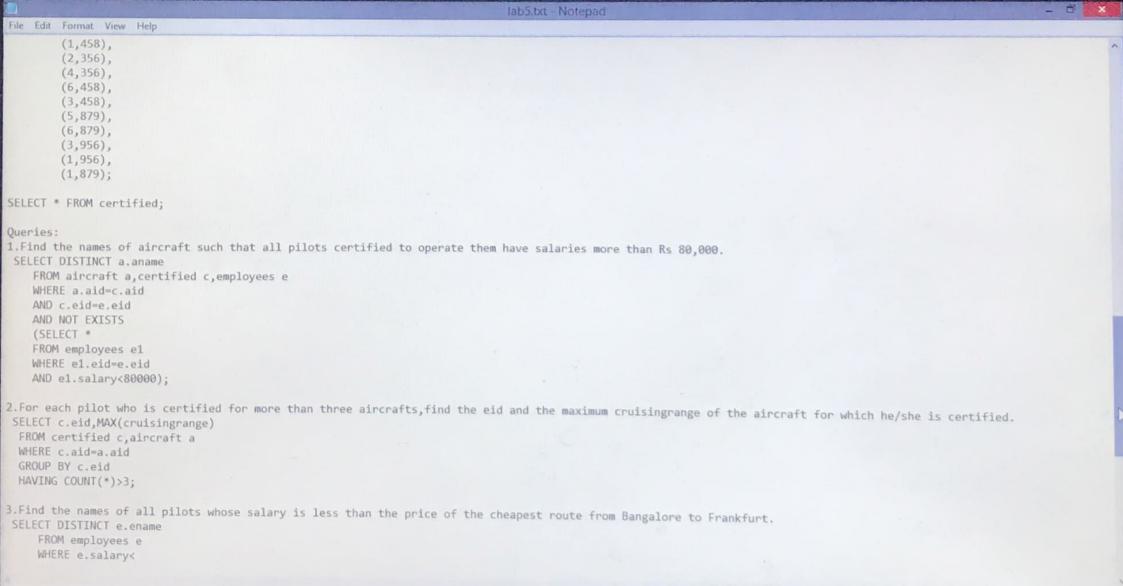


```
File Edit Format View Help
CREATE DATABASE flights;
USE flights;
CREATE TABLE flight(
     no INT,
     frm VARCHAR(20),
     too VARCHAR(20),
     distance INT,
     departs VARCHAR(20),
     arrives VARCHAR(20),
     price REAL,
     PRIMARY KEY (no) );
DESC flight;
CREATE TABLE aircraft(
     aid INT,
     aname VARCHAR(20),
     cruisingrange INT,
    PRIMARY KEY (aid) );
 DESC aircraft;
 CREATE TABLE employees(
      eid INT,
     ename VARCHAR(20),
      salary INT,
     PRIMARY KEY (eid) );
 DESC employees;
 CREATE TABLE certified(
      eid INT,
      aid INT,
      PRIMARY KEY (eid, aid),
      FOREIGN KEY (eid) REFERENCES employees (eid),
      FOREIGN KEY (aid) REFERENCES aircraft (aid) );
DESC certified;
INSERT INTO flight (no, frm, too, distance, departs, arrives, price) VALUES
             (1, 'Bangalore', 'Mangalore', 360, '10:45:00', '12:00:00', 10000),
             (2, 'Bangalore', 'Delhi', 5000, '12:15:00', '04:30:00', 25000),
             (3, 'Bangalore', 'Mumbai', 3500, '02:15:00', '05:25:00', 30000),
             (4, 'Delhi', 'Mumbai', 4500, '10:15:00', '12:05:00', 35000).
```

```
File Edit Format View Help
              (1, 'Bangalore', 'Mangalore', 360, '10:45:00', '12:00:00', 10000),
              (2, 'Bangalore', 'Delhi', 5000, '12:15:00', '04:30:00', 25000),
              (3, 'Bangalore', 'Mumbai', 3500, '02:15:00', '05:25:00', 30000),
              (4, 'Delhi', 'Mumbai', 4500, '10:15:00', '12:05:00', 35000),
             (5, 'Delhi', 'Frankfurt', 18000, '07:15:00', '05:30:00', 90000),
             (6, 'Bangalore', 'Frankfurt', 19500, '10:00:00', '07:45:00', 95000),
              (7, 'Bangalore', 'Frankfurt', 17000, '12:00:00', '06:30:00', 99000);
SELECT * FROM flight;
INSERT INTO aircraft (aid, aname, cruisingrange) values
         (124, 'Airbus', 2000),
         (304, 'Boeing', 4000),
         (201, 'Jet01', 30000),
         (458, 'Airbus 380', 7000),
         (356, 'Aircraft', 600),
         (879, 'lufthansa', 7000),
         (956, 'emirates', 2000);
SELECT * FROM aircraft:
INSERT INTO employees (eid, ename, salary) VALUES
         (1, 'Lucus', 40000),
         (2, 'Chen', 50000),
         (3, 'Felix', 60000),
         (4, 'Harry', 35000),
         (5, 'Lexi', 95000),
         (6, 'Cole', 80000),
         (7, 'Levi', 100000);
SELECT * FROM employees;
INSERT INTO certified (eid, aid) VALUES
         (1,124),
         (2,124),
         (1,356),
         (5,356),
         (7,356),
         (1,304),
         (2,304),
```



```
lab5.txt - Notepad
File Edit Format View Help
    FROM aircraft a, certified c, employees e
    WHERE a.aid=c.aid
    AND c.eid=e.eid
    AND NOT EXISTS
    (SELECT *
    FROM employees e1
    WHERE el.eid=e.eid
2. For each pilot who is certified for more than three aircrafts, find the eid and the maximum cruisingrange of the aircraft for which he/she is certified.
 SELECT c.eid, MAX(cruisingrange)
 FROM certified c,aircraft a
  WHERE c.aid-a.aid
  GROUP BY c.eid
  HAVING COUNT(*)>3;
3. Find the names of all pilots whose salary is less than the price of the cheapest route from Bangalore to Frankfurt.
 SELECT DISTINCT e.ename
     FROM employees e
     WHERE e.salary<
     (SELECT MIN(f.price)
     FROM flight f
     WHERE f.frm='Bangalore'
     AND f.too='Frankfurt');
4. For all aircrafts with cruisingrange over 1000 kms, find the name of the aircraft and the average salary of all pilots certified for this aircraft.
 SELECT a.aid, a.aname, AVG(e.salary)
    - FROM aircraft a, certified c, employees e
    WHERE a.aid=c.aid
    AND c.eid=e.eid
    AND a.cruisingrange>1000
    GROUP BY a.aid, a.aname;
5. Find the names of pilots certified for some Boeing aircraft.
SELECT distinct e.ename
    FROM employees e, aircraft a, certified c
```

WHERE e.eid=c.eid

```
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```

HAVING COUNT(*)>3;

3. Find the names of all pilots whose salary is less than the price of the cheapest route from Bangalore to Frankfurt. SELECT DISTINCT e.ename

FROM employees e
WHERE e.salary<
(SELECT MIN(f.price)
FROM flight f
WHERE f.frm='Bangalore'
AND f.too='Frankfurt');

4.For all aircrafts with cruisingrange over 1000 kms, find the name of the aircraft and the average salary of all pilots certified for this aircraft.

SELECT a.aid,a.aname,AVG(e.salary)
- FROM aircraft a, certified c, employees e

WHERE a.aid=c.aid
AND c.eid=e.eid

AND a.cruisingrange>1000 GROUP BY a.aid,a.aname;

5.Find the names of pilots certified for some Boeing aircraft.
SELECT distinct e.ename

FROM employees e,aircraft a,certified c
WHERE e.eid=c.eid
AND c.aid=a.aid
AND a.aname='Boeing';

6. Find the aid's of all aircraft that can be used on routes from Bangalore to Delhi.

SELECT a.aid
FROM aircraft a
WHERE a.cruisingrange>
(SELECT MIN(f.distance)
FROM flight f
WHERE f.frm='Bangalore'
AND f.too='Delhi');