

Csc343 SQL Exercise 4.5 Solutions

```
Q1&2)  SELECT C.eid, E.ename
FROM Certified C, Aircraft A, Employees E
WHERE C.aid = A.aid
AND A.aname = 'Boeing'
AND E.eid = C.eid
```

```
Q3) SELECT A.aid
FROM Flights F, Aircraft A
WHERE F.from = 'Bonn' AND F.to = 'Madras'
AND A.cruisingrange >= F.distance;
```

```
Q4)  SELECT F.flno
FROM Employees E, Certified C, Flights F, Aircraft A
WHERE E.eid = C.eid
AND E.salary > 100,000
AND A.aid = C.aid
AND A.cruisingrange >= F.distance
```

```
Q5)
SELECT E.ename
FROM Certified C, Aircraft A, Employees E
WHERE C.eid = E.eid
AND C.aid = A.aid
AND A.cruisingrange > 3000
-- (AND A.aname <> Boeing)?      <--WRONG
AND C.eid NOT IN ( SELECT C2.eid
                   FROM Certified C2, Aircraft A2
                   WHERE A2.aid=C2.aid
                   AND A2.aname = 'Boeing' )
```

Q6)

```
SELECT E.eid
FROM Employees E
WHERE E.salary = (SELECT MAX(E2.salary)
                  FROM Employees E2);
```

Q7) SELECT E.eid

```
FROM Employees E
WHERE E.salary = (SELECT MAX(E2.salary)
                  FROM Employees E2
                  WHERE E2.salary <> (SELECT MAX(E3.salary)
                                       FROM Employees E3) )
```

Q8)

```
SELECT Temp.eid
FROM (SELECT C.eid, COUNT(C.aid) AS cnt
      FROM Certified C
      GROUP BY C.eid) AS Temp
WHERE Temp.cnt = (SELECT MAX(Temp.cnt) FROM Temp)
```

Q9)

```
SELECT Temp.eid
FROM (SELECT C.eid, COUNT(C.aid) AS cnt
      FROM Certified C
      GROUP BY C.eid) AS Temp
WHERE Temp.cnt = 3;
```

Q10) SELECT SUM(E.salaries)

```
FROM Employees E
```