DBMS Lab – 'N' Batch

1. Create the table for the following relations to keep track of airline flight information:

   Flights(*flno:* integer, *from:* string, *to:* string, *distance:* integer, *departs:* time, *arrives:* time, *price:* real, *aid*: integer)

   Aircraft(*aid:* integer, *aname:* string, *cruisingrange:* integer)

   Certified(*eid:* integer, *aid:* integer)

   Employees(*eid:* integer, *ename:* string, *salary:* integer)

(a) Note that the Employees relation describes pilots and other kinds of employees as well; every pilot is certified for some aircraft, and only pilots are certified to fly. Write each of the following queries in SQL.

1. Write the SQL statements required to create these relations, including appropriate versions of all primary and foreign key integrity constraints.
2. Print the enames of pilots who can operate planes with cruisingrange greater than 3000 miles but are not certified on any Boeing aircraft.
3. Find the names of pilots whose salary is less than the price of the cheapest route from Chennai to Los Angeles.
4. Print the name and salary of every nonpilot whose salary is more than the average salary for pilots.
5. Print the names of employees who are certified only on aircrafts with cruisingrange longer than 1000 miles, but on at least two such aircrafts.
6. Find the number of employees who are not certified as pilots.
7. Find the number the pilots who are certified for more than two aircrafts on routes from Chennai to Dubai.

(b) Using SQL define a view consisting of the details of the pilots who makes more than $100,000 with any route.