



CSE 311L(Database Management System)

Database Lab Assignment (Deadline: 16-11-2019)

Implementing a sample Database

01. Create 4 tables described below. Name these tables as *FLIGHTS*, *AIRCRAFT*, *CERTIFIED*, and *EMPLOYEES*

FLIGHTS(flno:varchar, ffrom:varchar, fto:varchar, distance:integer, departs:date, Arrives:date);

AIRCRAFT(aid:varchar, aname:varchar, Cruisingrange:number);

EMPLOYEES(eid:varchar, Ename:varchar, Salary:number);

CERTIFIED (eid:varchar, aid:varchar);

Your Tasks:

Take screenshots of the following and submit printouts of them as Assignment-01

- ▶ The underlined fields are the primary keys of their respective tables
- ▶ Insert the values according to the data provided at the end.
- ▶ Use the command DESCRIBE to show the schema of the tables
- ▶ Use the command SELECT * to show the content of the tables
- ▶ Write SQL commands to perform all the required query and take snapshot of them.
- ▶ Prepare your home assignments with the snapshots of table schema, table data and query outputs. Print the assignment and submit it.

(Good Luck!)

Table: FLIGHTS

Flno	Ffrom	Fto	Distance	Departs	Arrives
246	Dhaka	Chittagong	1020	09:30	12:43
272	Chittagong	Cox's Bazar	820	13:20	16:13
292	Bandarban	Chittagong	190	10:44	11:40
895	Chittagong	Jessore	2060	07:00	09:05
001	Jessore	Khulna	7240	14:00	19:20
607	Khulna	Sylhet	1650	20:45	22:25
852	Barisal	Faridpur	6525	10:30	09:25
130	Jessore	Bogra	2790	07:00	15:09

Table: AIRCRAFT

Aid	Aname	Cruisingrange
1	Airbus A319	3000
2	Airbus A330	6400
3	Airbus A340	8000
4	Boeing 717	1580
5	Boeing 737-700	3800
6	Boeing 767-300	7080
7	Boeing 747-400	8380
8	Dornier 228	834
9	Ilyushin Il62	11000

Table: EMPLOYEES

Eid	Ename	Salary
1	Jafar Ahmed	58000
2	Shariar Choudhury	103000
3	Jamal E Mollah	55000
4	Alvi Hussain	67000
5	Tonmoy Jaman	81000
6	Vibek Joardar	45000
7	Jannatul Lamia	118000
8	Toukir Munshi	79000
9	Yakub Noby	69000
10	Mithila Rounok	48000
11	Jobbar Shekh	42000
12	Chunnu Wahidul	58000

Table: EMPLOYEES

Eid	Aid
1	1
1	4
2	2
2	6
2	7
3	1
3	5
4	1
4	4
4	5
5	3
5	7
7	3
7	6
7	7
7	9
9	2
9	5
9	6
10	4
10	8

TIPs

```
-----  
  
insert into table_name  
(date_field)  
values  
(TO_DATE('2003/05/03 21:02:44', 'yyyy/mm/dd hh24:mi:ss'));  
  
-----
```

```
select to_char(meeting_time,'HH24:MI:SS') from schedule  
  
-----
```

```
select to_date('10:00', 'hh:mi') from dual  
  
-----
```

List of queries as Assignment:

- 1) Find the names of Pilots certified for some Boeing aircraft
- 2) Find the *aid* 's of all aircraft that can be used on non-stop flights from Jessore to Khulna.
(hint: Only those aircraft are eligible which have *cruisingrange* greater than distance between Jessore and Khulna)
- 3) Identify the flights that can be piloted by every pilot whose salary is more than \$100000.
- 4) Find the names of Pilots who can operate planes with a range greater than 3,000 miles but are not certified on any Boeing aircraft.
- 5) Find the *eid* 's of employees who make the second highest salary.
- 6) Find the *eid* 's of employees who are certified for the largest number of aircraft.
- 7) Find the *eid* 's of employees who are certified for exactly three aircraft
- 8) Find the total amount paid to employees as salaries.
- 9) Find the names of aircraft such that all pilots certified to operate them earn more than 80,000.
- 10) Foreach pilot who is certified for more than three aircraft, find the *aid* and the maximum *cruisingrange* of the aircraft that he (or she) is certified for.
- 11) For all aircraft with *cruisingrange* over 1000 miles, find the name of the aircraft and the average salary of all pilots certified for this aircraft.
- 12) Find the *aid*'s of all aircraft that can be used on routes from Jessore to Chittagong.
- 13) Compute and print the difference between the average salary of a pilot and the average salary of all employees (including pilots)
- 14) Print the name and salary of every nonpilot whose salary is more than the average salary of pilots.
- 15) Find *aid* 's of all flights which fly from Jessore to Sylhet, n not more than 2 hops.