Name: SHUVASHIS BASAK

ID: 22301769

Sec: 16

Assignment: 02

Table making:

Query:

```
1. CREATE TABLE Employee (
-> employee_id char(10),
-> first_name varchar(20),
-> last_name varchar(20),
-> email varchar(60),
-> phone_number char(14),
-> hire_date date,
-> job_id char(10),
-> salary int,
-> commission_pct decimal(5,3),
-> manager_id char(10),
-> department_id char(10)
-> );
```

- 2. IINSERT INTO Employee (employee_id, first_name, last_name, email, phone_number, hire_date, job_id, salary, commission_pct, manager_id, department_id)
 - -> VALUES
- -> ('EMP001', 'Rahim', 'Ahmed', 'rahim.ahmed@example.com', '+8801712345678', '2023-01-01', 'JOB001', 50000, 17.555, 'MNG001', 'DPT001'),
- -> ('EMP002', 'Alif', 'Khan', 'alif.khan@example.com', '+8801712345679', '2023-02-01', 'JOB002', 60000, 10.123, 'MNG002', 'DPT005'),
- -> ('EMP003', 'Mehar', 'Alam', 'mehar.alam@example.com', '+8801712345680', '2023-03-01', 'JOB003', 70000, 5.789, 'MNG001', 'DPT007'),
- -> ('EMP004', 'Fahima', 'Begum', 'fahima.begum@example.com', '+8801712345681', '2023-04-01', 'JOB002', 2500, 2.345, 'MNG003', 'DPT001'),

- -> ('EMP005', 'Mohammad', 'Ibrahim', 'mohammad.ibrahim@example.com', '+8801712345682', '2023-05-01', 'JOB003', 30000, 15.678, 'MNG002', 'DPT005'),
- -> ('EMP006', 'Jahid', 'Hasan', 'jahid.hasan@example.com', '+8801712345683', '2023-06-01', 'JOB001', 48000, 3.456, 'MNG001', 'DPT001'),
- -> ('EMP007', 'Samira', 'Begum', 'samira.begum@example.com', '+8801712345684', '2023-07-01', 'JOB003', 4000, 7.891, 'MNG002', 'DPT007'),
- -> ('EMP008', 'Nasir', 'Rahman', 'nasir.rahman@example.com', '+8801712345685', '2023-08-01', 'JOB002', 58000, 12.345, 'MNG001', 'DPT005'),
- -> ('EMP009', 'Anika', 'Akhtar', 'anika.akhtar@example.com', '+8801712345686', '2023-09-01', 'JOB001', 3200, 8.765, 'MNG002', 'DPT001'),
- -> ('EMP010', 'Farhan', 'Hossain', 'farhan.hossain@example.com', '+8801712345687', '2023-10-01', 'JOB003', 67000, 19.876, 'MNG001', 'DPT007');

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_i
 EMP001	Rahim	Ahmed	rahim.ahmed@example.com	+8801712345678	2023-01-01	JOB001	50000	17.555	MNG001	DPT001
EMP002	Alif	Khan	alif.khan@example.com	+8801712345679	2023-02-01	J0B002	60000	10.123	MNG002	DPT005
EMP003	Mehar	Alam	mehar.alam@example.com	+8801712345680	2023-03-01	JOB003	70000	5.789	MNG001	DPT007
EMP004	Fahima	Begum	fahima.begum@example.com	+8801712345681	2023-04-01	J0B002	2500	2.345	MNG003	DPT001
EMP005	Mohammad	Ibrahim	mohammad.ibrahim@example.com	+8801712345682	2023-05-01	JOB003	30000	15.678	MNG002	DPT005
EMP006	Jahid	Hasan	jahid.hasan@example.com	+8801712345683	2023-06-01	JOB001	48000	3.456	MNG001	DPT001
EMP007	Samira	Begum	samira.begum@example.com	+8801712345684	2023-07-01	J0B003	4000	7.891	MNG002	DPT007
EMP008	Nasir	Rahman	nasir.rahman@example.com	+8801712345685	2023-08-01	J0B002	58000	12.345	MNG001	DPT005
EMP009	Anika	Akhtar	anika.akhtar@example.com	+8801712345686	2023-09-01	JOB001	3200	8.765	MNG002	DPT001
EMP010	Farhan	Hossain	farhan.hossain@example.com	+8801712345687	2023-10-01	JOB003	67000	19.876	MNG001	DPT007

Question-1:

Find the **first_name**, **last_name**, **email**, **phone_number**, **hire_date** and **department_id** of all the employees with the latest **hire_date**.

Query:

select first_name, last_name, email, phone_number, hire_date, department_id from employee where hire_date= (select max(hire_date) from employee);



Question-2:

Find the *first_name*, *last_name*, *employee_id*, *phone_number*, *salary*, and *department_id* of all the employees with the lowest *salary* in each department.

Query:

select first_name, last_name, employee_id, phone_number, min(salary) as min_salary, department_id from employee group by department_id;

+ first_name	 last_name	employee_id	phone_number	 min_salary	 department_id
Rahim Alif Mehar	Ahmed Khan Alam	EMP001 EMP002 EMP003	+8801712345678 +8801712345679 +8801712345680	2500 30000 4000	DPT001 DPT005 DPT007
rows in set	(0.001 sec)				-

Question-3: \

Find the *first_name*, *last_name*, *employee_id*, *commission_pct* and *department_id* of all the employees in the department 'DPT007' who have a lower commission_pct than all of the department 'DPT005' employees.

Query:

select first_name, last_name, employee_id, commission_pct, department_id from employee where department_id= 'DPT007' and commission_pct < all(select commission_pct from employee where department_id='DPT005');

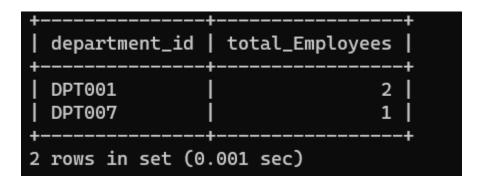
+	last_name	 employee_id	commission_pct	+ department_id
Mehar Samira	Alam Begum	EMP003 EMP007		DPT007 DPT007
2 rows in set	(0.007 sec)	+	 	+ +

Question-4:

Find the **department_id** and total number of employees of each department which does not have a single employee under it with a **salary** more than 30,000.

Query:

select distinct department_id, count(*) as total_Employees from employee where salary < 30000 group by department_id;

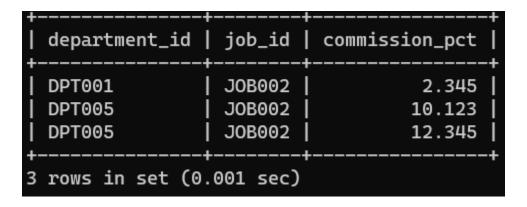


Question-5:

For each department, find the **department_id**, **job_id** and **commission_pct** with **commission_pct** less than at least one other **job_id** in that department.

Query:

select department_id, job_id, commission_pct from employee L1 where exists(select * from employee L2 where L1.department_id=L2.department_id and L1.job_id != L2.job_id and L1.commission_pct < L2.commission_pct);



Question-6: Find the *manager_id* who does not have any employee under them with a *salary* less than 3500.

Query: select distinct manager_id from employee where salary > 3500;

Question-7: Find the *first_name*, *last_name*, *employee_id*, *email*, *salary*, *department_id* and *commission_pct* of the employee with the lowest *commission_pct* under each manager.

Query: select first_name, last_name, employee_id, email, salary, department_id, commission_pct from employee where (manager_id, commission_pct) in (select manager_id, min(commission_pct) from employee group by manager_id);

			last_name, employee_id, ema loyee group by manager_id);	ail, sala	ry, department_io	d, commission_pct	from employee v	where (manager_i	id, commission_pct) in (select m
first_name	last_name	employee_id	email	salary	department_id	commission_pct	* 			
Fahima Jahid Samira	Begum Hasan Begum	EMP004 EMP006 EMP007	fahima.begum@example.com jahid.hasan@example.com samira.begum@example.com	48000	DPT001 DPT001 DPT007	2.345 3.456 7.891				
3 rows in set	(0.001 sec)				+		+			