


CSE370 : Database Systems

Assignment 01/02/03 | Fall 2024

ID : <8 Digit Student ID> | Name : Full Official Name

No 1 Query (as Plain Text)	select first_name, last_name, email, phone_number, hire_date, department_id from employee order by hire_date desc;
No 1 SS (of Query & Output in Shell)	 <pre>MariaDB [Company_23201169]> select first_name, last_name, email, phone_number, hire_date, department_id from employee order by hire_date desc; -> ; +-----+-----+-----+-----+-----+-----+ first_name last_name email phone_number hire_date department_id +-----+-----+-----+-----+-----+-----+ Sultana Parvin sultana.parvin@example.com 01212345678 2025-12-10 DPT010 Raju Ahmed raju.ahmed@example.com 01112345678 2025-12-05 DPT009 Nusrat Jahan nusrat.jahan@example.com 01312345678 2025-12-01 DPT008 Arif Khan arif.khan@example.com 01412345678 2025-11-25 DPT007 Sumaiya Begum sumaiya.begum@example.com 01512345678 2025-11-20 DPT006 Kamal Hossain kamal.hossain@example.com 01612345678 2025-11-15 DPT005 Anika Islam anika.islam@example.com 01912345678 2025-11-10 DPT004 Rahim Chowdhury rahim.chowdhury@example.com 01812345678 2025-11-05 DPT003 Fatima Akter fatima.akter@example.com 01712345678 2025-11-01 DPT002 Niloy Sarkar niloynilnblue@gmail.com 01799937774 2025-10-22 DPT001 +-----+-----+-----+-----+-----+-----+ 10 rows in set (0.000 sec)</pre>
No 2 Query (as Plain Text)	select first_name, last_name, employee_id, phone_number, salary , department_id from employee order by salary asc;

No 2 SS
(of Query & Output
in Shell)

```
MariaDB [Company_23201169]> select first_name, last_name, employee_id, phone_number, salary , department_id
-> from employee order by salary asc;
```

first_name	last_name	employee_id	phone_number	salary	department_id
Sultana	Parvin	EMP010	01212345678	45000	DPT010
Raju	Ahmed	EMP009	01112345678	50000	DPT009
Nusrat	Jahan	EMP008	01312345678	55000	DPT008
Sumaiya	Begum	EMP006	01512345678	60000	DPT006
Arif	Khan	EMP007	01412345678	65000	DPT007
Anika	Islam	EMP004	01912345678	70000	DPT004
Kamal	Hossain	EMP005	01612345678	75000	DPT005
Rahim	Chowdhury	EMP003	01812345678	85000	DPT003
Fatima	Akter	EMP002	01712345678	90000	DPT002
Niloy	Sarkar	EMP001	01799937774	100000	DPT001

```
10 rows in set (0.000 sec)
```

No 3 Query
(as Plain Text)

```
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');
```

No 3 SS
(of Query & Output
in Shell)

```
MariaDB [Company_23201169]>
MariaDB [Company_23201169]> 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');
+-----+-----+-----+-----+-----+
| first_name | last_name | employee_id | commission_pct | department_id |
+-----+-----+-----+-----+-----+
| Arif       | Khan     | EMP007      | 0.100          | DPT007        |
| Fahim      | Mondol   | EMP011      | 0.100          | DPT007        |
| Ayesha     | Siddika  | EMP012      | 0.100          | DPT007        |
+-----+-----+-----+-----+-----+
3 rows in set (0.000 sec)

MariaDB [Company_23201169]> _
```

No 4 Query
(as Plain Text)

```
SELECT Department_ID, COUNT(Employee_ID) AS NumberOfEmployees
FROM Employee
WHERE Salary < 30000 Group by Department_id;
```

No 4 SS
(of Query & Output
in Shell)

```
MariaDB [Company_23201169]> SELECT Department_ID, COUNT(Employee_ID) AS NumberOfEmployees
-> FROM Employee
-> WHERE Salary < 30000 Group by Department_id;
+-----+-----+
| Department_ID | NumberOfEmployees |
+-----+-----+
| DPT001        | 1                 |
| DPT002        | 1                 |
| DPT004        | 2                 |
| DPT006        | 1                 |
| DPT008        | 1                 |
| DPT010        | 1                 |
+-----+-----+
6 rows in set (0.000 sec)
```

No 5 Query (as Plain Text)	<pre>select distinct e1.department_id , e1.job_id, e1.commission_pct -> from employee e1 -> where -> exists (select 1 from employee e2 where e2.department_id=e1.department_id and -> e2.job_id != e1.job_id -> and -> e2.commission_pct > e1.commission_pct);</pre>

No 5 SS
(of Query & Output
in Shell)

```
MariaDB [Company_23201169]>  
MariaDB [Company_23201169]> select distinct e1.department_id , e1.job_id, e1.commission_pct  
-> from employee e1  
-> where  
-> exists (select 1 from employee e2 where e2.department_id=e1.department_id and  
-> e2.job_id != e1.job_id  
-> and  
-> e2.commission_pct > e1.commission_pct);
```

department_id	job_id	commission_pct
DPT001	JOB013	0.000
DPT001	JOB026	0.100
DPT002	JOB014	0.000
DPT002	JOB015	0.100
DPT003	JOB016	0.200
DPT004	JOB017	0.000
DPT004	JOB018	0.000
DPT006	JOB020	0.000
DPT008	JOB022	0.000
DPT010	JOB025	0.000
DPT005	JOB005	0.250
DPT007	JOB007	0.100
DPT007	JOB011	0.100
DPT007	JOB012	0.100
DPT008	JOB008	0.100
DPT009	JOB009	0.050

16 rows in set (0.009 sec)

No 6 Query
(as Plain Text)

```
select distinct manager_id from employee where manager_id not in  
(select distinct manager_id from employee where salary < 3500);
```

No 6 SS
(of Query & Output
in Shell)

```
MariaDB [Company_23201169]>
MariaDB [Company_23201169]> select distinct manager_id from employee where manager_id not in
-> (select distinct manager_id from employee where salary < 3500);
+-----+
| manager_id |
+-----+
| MNG003     |
| MNG004     |
| MNG005     |
| MNG006     |
| MNG007     |
| MNG008     |
| MNG009     |
| MNG010     |
| MNG011     |
| MNG012     |
| MNG013     |
| MNG014     |
| MNG015     |
| MNG016     |
| MNG017     |
| MNG018     |
| MNG019     |
| MNG020     |
| MNG021     |
| MNG022     |
| MNG023     |
| MNG024     |
| MNG025     |
| MNG026     |
+-----+
24 rows in set (0.001 sec)

MariaDB [Company_23201169]>
```

No 7 Query
(as Plain Text)

```
SELECT
  e1.first_name,
  e1.last_name,
  e1.employee_id,
```

```
e1.email,  
e1.salary,  
e1.department_id,  
e1.commission_pct  
FROM  
  Employee e1  
WHERE  
  e1.Commission_Pct = (  
  
    SELECT  
      MIN(e2.Commission_Pct)  
    FROM  
      Employee e2  
    WHERE  
      e2.Manager_ID = e1.Manager_ID  
  );
```

No 7 SS
(of Query & Output
in Shell)

XAMPP for Windows - mysql -u root

```
-> e1.last_name,
-> e1.employee_id,
-> e1.email,
-> e1.salary,
-> e1.department_id,
-> e1.commission_pct
-> FROM
-> Employee e1
-> WHERE
-> e1.Commission_Pct = (
->
-> SELECT
-> MIN(e2.Commission_Pct)
-> FROM
-> Employee e2
-> WHERE
-> e2.Manager_ID = e1.Manager_ID
-> );
```

first_name	last_name	employee_id	email	salary	department_id	commission_pct
Rahim	Chowdhury	EMP003	rahim.chowdhury@example.com	85000	DPT003	0.300
Anika	Islam	EMP004	anika.islam@example.com	70000	DPT004	0.200
Kamal	Hossain	EMP005	kamal.hossain@example.com	75000	DPT005	0.250
Sumaiya	Begum	EMP006	sumaiya.begum@example.com	60000	DPT006	0.150
Arif	Khan	EMP007	arif.khan@example.com	65000	DPT007	0.100
Nusrat	Jahan	EMP008	nusrat.jahan@example.com	55000	DPT008	0.100
Raju	Ahmed	EMP009	raju.ahmed@example.com	50000	DPT009	0.050
Fahim	Mondol	EMP011	fahim.mondol@example.com	62000	DPT007	0.100
Ayesha	Siddika	EMP012	ayesha.siddika@example.com	63000	DPT007	0.100
Rahim	Chowdhury	EMP013	rahim.chow@example.com	25000	DPT001	0.000
Karim	Hossain	EMP014	karim.hossain@example.com	28000	DPT002	0.000
Fatima	Begum	EMP015	fatima.begum@example.com	45000	DPT002	0.100
Imran	Khan	EMP016	imran.khan@example.com	50000	DPT003	0.200
Jannat	Akter	EMP017	jannat.akter@example.com	27000	DPT004	0.000
Mehedi	Hasan	EMP018	mehedi.hasan@example.com	29000	DPT004	0.000
Nusrat	Jahan	EMP019	nusrat.jahan@example.com	60000	DPT005	0.300
Priya	Saha	EMP020	priya.saha@example.com	26000	DPT006	0.000
Rifat	Ahmed	EMP021	rifat.ahmed@example.com	70000	DPT007	0.400
Sabina	Yasmin	EMP022	sabina.yasmin@example.com	29500	DPT008	0.000
Tanim	Islam	EMP023	tanim.islam@example.com	55000	DPT008	0.200
Urmi	Dey	EMP024	urmi.dey@example.com	80000	DPT009	0.500
Wasim	Akram	EMP025	wasim.akram@example.com	28500	DPT010	0.000
Zara	Parvin	EMP026	zara.parvin@example.com	42000	DPT001	0.100
Borna	Islam	EMP028	borna.islam@example.com	31000	DPT010	0.000
Dilara	Zaman	EMP030	dilara.zaman@example.com	27000	DPT006	0.000
Borna	Islam	EMP028	borna.islam@example.com	31000	DPT010	0.000
Dilara	Zaman	EMP030	dilara.zaman@example.com	27000	DPT006	0.000
Elias	Molla	EMP031	elias.molla@example.com	32000	DPT010	0.000
Gazi	Rahman	EMP033	gazi.rahman@example.com	27500	DPT006	0.000
Hasan	Chowdhury	EMP034	hasan.chow@example.com	3500	DPT001	0.000
Iffat	Ara	EMP035	iffat.ara@example.com	3200	DPT002	0.000
Jamil	Hossain	EMP036	jamil.hossain@example.com	3400	DPT001	0.000
Keya	Saha	EMP037	keya.saha@example.com	3000	DPT002	0.000

8 rows in set (0.001 sec)

ariaDB [Company_23201169]>

