

CREATE TABLE & SHOW TABLE:

```
CREATE table employees
( 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) );
```

```
MariaDB [area120]> CREATE table employees
-> ( 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) );
Query OK, 0 rows affected (0.019 sec)
```

Insert into employees values

```
("EMP01", "Syeda", "Mahjabin", "syeda_mahjabin@gmail.com", "+8801897654001",  
"2019-01-01", "JOB001", 129000, 20.999, "M9", "DPT009"),  
("EMP02", "Sanjida", "Ritu", "sanjida_ritu@gmail.com", "+8801897654002", "2019-12-01",  
"JOB002", 128000, 20.523, "M8", "DPT008"),  
("EMP03", "Sabrina", "Lamia", "sabrina_lamia@gmail.com", "+8801897654003",  
"2019-10-01", "JOB003", 127000, 20.132, "M8", "DPT008"),  
("EMP04", "Anisha", "Megha", "anisha_megha@gmail.com", "+8801897654004",  
"2019-06-01", "JOB004", 126000, 20.142, "M7", "DPT007"),  
("EMP05", "Gungun", "Proma", "gungun_proma@gmail.com", "+8801897654005",  
"2019-06-01", "JOB005", 125000, 20.967, "M7", "DPT007"),  
("EMP06", "Syed", "Fahim", "syed_fahim@gmail.com", "+8801897654006", "2019-05-01",  
"JOB006", 124000, 19.893, "M7", "DPT007"),  
("EMP07", "Adiba", "Azmi", "adiba_azmi@gmail.com", "+8801897654007", "2019-09-01",  
"JOB007", 123000, 12.954, "M6", "DPT006"),  
("EMP08", "Jannatun", "Ripty", "jannatun_ripty@gmail.com", "+8801897654008",  
"2019-10-01", "JOB008", 122000, 15.657, "M5", "DPT005"),  
("EMP09", "Amirun", "Monika", "amirun_monika@gmail.com", "+8801897654009",  
"2019-12-01", "JOB009", 121000, 10.435, "M6", "DPT006"),  
("EMP10", "Humayra", "Sathi", "humayra_sathi@gmail.com", "+8801897654010",  
"2019-01-01", "JOB010", 120000, 21.123, "M5", "DPT005");
```

```
MariaDB [area120]> Insert into employees values  
-> ("EMP01", "Syeda", "Mahjabin", "syeda_mahjabin@gmail.com", "+8801897654001", "2019-01-01", "JOB001", 129000, 20.999, "M9", "DPT009"),  
-> ("EMP02", "Sanjida", "Ritu", "sanjida_ritu@gmail.com", "+8801897654002", "2019-12-01", "JOB002", 128000, 20.523, "M8", "DPT008"),  
-> ("EMP03", "Sabrina", "Lamia", "sabrina_lamia@gmail.com", "+8801897654003", "2019-10-01", "JOB003", 127000, 20.132, "M8", "DPT008"),  
-> ("EMP04", "Anisha", "Megha", "anisha_megha@gmail.com", "+8801897654004", "2019-06-01", "JOB004", 126000, 20.142, "M7", "DPT007"),  
-> ("EMP05", "Gungun", "Proma", "gungun_proma@gmail.com", "+8801897654005", "2019-06-01", "JOB005", 125000, 20.967, "M7", "DPT007"),  
-> ("EMP06", "Syed", "Fahim", "syed_fahim@gmail.com", "+8801897654006", "2019-05-01", "JOB006", 124000, 19.893, "M7", "DPT007"),  
-> ("EMP07", "Adiba", "Azmi", "adiba_azmi@gmail.com", "+8801897654007", "2019-09-01", "JOB007", 123000, 12.954, "M6", "DPT006"),  
-> ("EMP08", "Jannatun", "Ripty", "jannatun_ripty@gmail.com", "+8801897654008", "2019-10-01", "JOB008", 122000, 15.657, "M5", "DPT005"),  
-> ("EMP09", "Amirun", "Monika", "amirun_monika@gmail.com", "+8801897654009", "2019-12-01", "JOB009", 121000, 10.435, "M6", "DPT006"),  
-> ("EMP10", "Humayra", "Sathi", "humayra_sathi@gmail.com", "+8801897654010", "2019-01-01", "JOB010", 120000, 21.123, "M5", "DPT005");  
Query OK, 10 rows affected (0.007 sec)  
Records: 10 Duplicates: 0 Warnings: 0
```

Select * from employees;

```
MariaDB [area120]> select * from employees;
```

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
EMP01	Syeda	Mahjabin	syeda_mahjabin@gmail.com	+8801897654001	2019-01-01	JOB001	129000	20.999	M9	DPT009
EMP02	Sanjida	Ritu	sanjida_ritu@gmail.com	+8801897654002	2019-12-01	JOB002	128000	20.523	M8	DPT008
EMP03	Sabrina	Lamia	sabrina_lamia@gmail.com	+8801897654003	2019-10-01	JOB003	127000	20.132	M8	DPT008
EMP04	Anisha	Megha	anisha_megha@gmail.com	+8801897654004	2019-06-01	JOB004	126000	20.142	M7	DPT007
EMP05	Gungun	Proma	gungun_proma@gmail.com	+8801897654005	2019-06-01	JOB005	125000	20.967	M7	DPT007
EMP06	Syed	Fahim	syed_fahim@gmail.com	+8801897654006	2019-05-01	JOB006	124000	19.893	M7	DPT007
EMP07	Adiba	Azmi	adiba_azmi@gmail.com	+8801897654007	2019-09-01	JOB007	123000	12.954	M6	DPT006
EMP08	Jannatun	Ripty	jannatun_ripty@gmail.com	+8801897654008	2019-10-01	JOB008	122000	15.657	M5	DPT005
EMP09	Amirun	Monika	amirun_monika@gmail.com	+8801897654009	2019-12-01	JOB009	121000	10.435	M6	DPT006
EMP10	Humayra	Sathi	humayra_sathi@gmail.com	+8801897654010	2019-01-01	JOB010	120000	21.123	M5	DPT005

10 rows in set (0.001 sec)

TASK-1:

Select first_name, last_name, email, phone_number, hire_date, department_id from employees where hire_date like (select max(hire_date) from employees);

```
MariaDB [area120]> Select first_name, last_name, email, phone_number, hire_date, department_id from employees where hire_date like (select max(hire_date) from employees);
```

first_name	last_name	email	phone_number	hire_date	department_id
Sanjida	Ritu	sanjida_ritu@gmail.com	+8801897654002	2019-12-01	DPT008
Amirun	Monika	amirun_monika@gmail.com	+8801897654009	2019-12-01	DPT006

TASK-2:

Select first_name, last_name, employee_id, phone_number, min(salary), department_id from employees group by department_id ;

```
MariaDB [area120]> Select first_name, last_name, employee_id, phone_number, min(salary), department_id from employees group by department_id ;
```

first_name	last_name	employee_id	phone_number	min(salary)	department_id
Jannatun	Ripty	EMP08	+8801897654008	120000	DPT005
Adiba	Azmi	EMP07	+8801897654007	121000	DPT006
Anisha	Megha	EMP04	+8801897654004	124000	DPT007
Sanjida	Ritu	EMP02	+8801897654002	127000	DPT008
Syeda	Mahjabin	EMP01	+8801897654001	129000	DPT009

5 rows in set (0.001 sec)

TASK-3:

Select first_name, last_name, employee_id, commission_pct, department_id from employees where department_id like "DPT007" and commission_pct < (select min(commission_pct) from employees where department_id like "DPT005");

```
MariaDB [area120]> Select first_name, last_name, employee_id, commission_pct, department_id from employees where department_id like "DPT007" and commission_pct < (select min(commission_pct) from employees where department_id like "DPT005");
```

Empty set (0.000 sec)

TASK-4:

Select department_id, count(*) from employees where salary <= 30000 group by department_id;

```
MariaDB [area120]> Select department_id, count(*) from employees where salary <= 30000 group by department_id;  
Empty set (0.005 sec)
```

TASK-5:

select department_id, job_id, commission_pct from employees E1 where exists (select * from employees E2 where E1.department_id = E2.department_id and E1.job_id != E2.job_id and E1.commission_pct < E2.commission_pct);

```
MariaDB [area120]> select department_id, job_id, commission_pct from employees E1 where exists (select * from employees E2 where E1.department_id = E2.department_id and E1.  
job_id != E2.job_id and E1.commission_pct < E2.commission_pct);  
+-----+-----+-----+  
| department_id | job_id | commission_pct |  
+-----+-----+-----+  
| DPT008        | J08003 | 20.132         |  
| DPT007        | J08006 | 19.893         |  
| DPT007        | J08004 | 20.142         |  
| DPT006        | J08009 | 10.435         |  
| DPT005        | J08008 | 15.657         |  
+-----+-----+-----+  
5 rows in set (0.001 sec)
```

TASK-6:

Select distinct manager_id FROM Employees Emp1 where not exists(SELECT manager_id from Employees Emp2 where Emp1.manager_id = Emp2.manager_id and Emp2.salary <= 3500);

```
MariaDB [area120]> select distinct manager_id from employees where salary >= 3500;  
+-----+  
| manager_id |  
+-----+  
| M9         |  
| M8         |  
| M7         |  
| M6         |  
| M5         |  
+-----+  
5 rows in set (0.001 sec)
```

TASK-7:

Select first_name, last_name, employee_id, email, salary, department_id, min(commission_pct) from employees group by manager_id ;

```
MariaDB [area120]> Select first_name, last_name, employee_id, email, salary, department_id, min(commission_pct) from employees group by manager_id ;
```

first_name	last_name	employee_id	email	salary	department_id	min(commission_pct)
Jannatun	Ripty	EMP08	jannatun_ripty@gmail.com	122000	DPT005	15.657
Adiba	Azmi	EMP07	adiba_azmi@gmail.com	123000	DPT006	10.435
Anisha	Megha	EMP04	anisha_megha@gmail.com	126000	DPT007	19.893
Sanjida	Ritu	EMP02	sanjida_ritu@gmail.com	128000	DPT008	20.132
Syeda	Mahjabin	EMP01	syeda_mahjabin@gmail.com	129000	DPT009	20.999

```
5 rows in set (0.002 sec)
```