

資料庫管理 HW03

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1. (a) Left join all advisors(e) and their advisees(s), if someone has no advisee, then s would be NULL.

```
1 select e.id, e.name from employee as e
2 left join employee s on e.id=s.supervisor_id
3 where s.supervisor_id is null;
```

- (b) Find the latest store id of each employee before 2025-01-05 and left join to the employee table.

```
1 select e.id as employee_id, h.store_id
2 from employee e
3 left join employee_store_history h
4 on e.id = h.employee_id
5 and h.start_date_time=(
6     select max(h2.start_date_time)
7     from employee_store_history h2
8     where h2.employee_id = e.id
9         and h2.start_date_time <= '2025-01-05'
10 );
```

- (c) Using limit 1 to obtain the first store id and limit 1 offset 1 to obtain the second store id (after skipping the first one), then join them to produce the final result.

```
1 select e.id as employee_id,
2     (select h1.store_id from employee_store_history h1 where h1.employee_id=e.id order by
3     ↪ h1.start_date_time limit 1) as first_store_id,
4     (select h2.store_id from employee_store_history h2 where h2.employee_id=e.id order by
5     ↪ h2.start_date_time limit 1 offset 1) as second_store_id
6 from employee e;
```
