

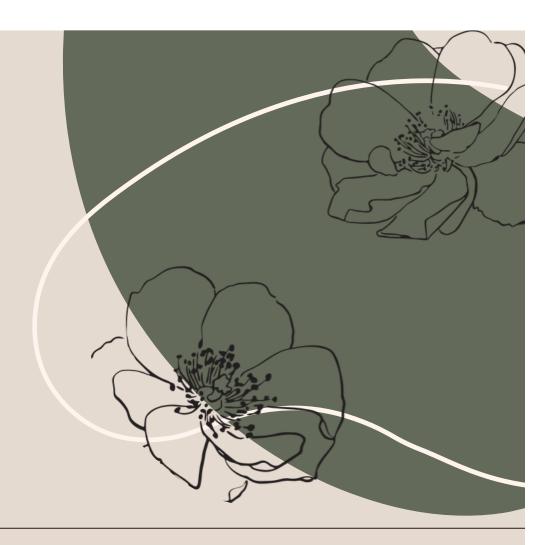
Q. We can convert any weak entity set to a strong entity set by simply adding appropriate attributes. Why, then, do we have weak entity sets?

#### Answer:

- 1. can be stored physically with their strong entities.
- 2. Weak entities can be deleted automatically when their strong entity is deleted.
- 3. They show the logical structure of an entity being dependent on another entity



i. Select employee.ID,person\_name from employee inner join works on employee.ID = works.ID inner join company on Works.company\_name = company.company\_name where employee.city = company.city;



ii.

select A.ID,A.person\_name

from employee A, employee B, manages M

where A.ID = M.ID and

M.manager\_id= B.ID and

A.street = B.street and A.city = B.city





SELECT employee.ID, employee.person\_name

FROM employee

INNER JOIN works

ON employee.ID = works.ID

GROUP BY works.company\_name

HAVING works.salary > AVG(works.salary);



## Question 4b

Q. Consider the following SQL query that seeks to find a list of titles of all courses taught in Spring 2017 along with the name of the instructor.

Select name, title
From instructor natural join teaches natural join section natural join course
wheresemester = 'Spring' and year = 2017What is wrong with this query?

Answer: It's wrong because dept\_name is an attribute of both course and instructor as a result of the natural join results are shown only when an instructor teaches a course in his/her department



