



XAVIER INSTITUTE OF ENGINEERING

Department of Information Technology

Assignment No: 1

Subject: SQL LAB

Class/Sem: SE/III

Date of Display: 3/07/19

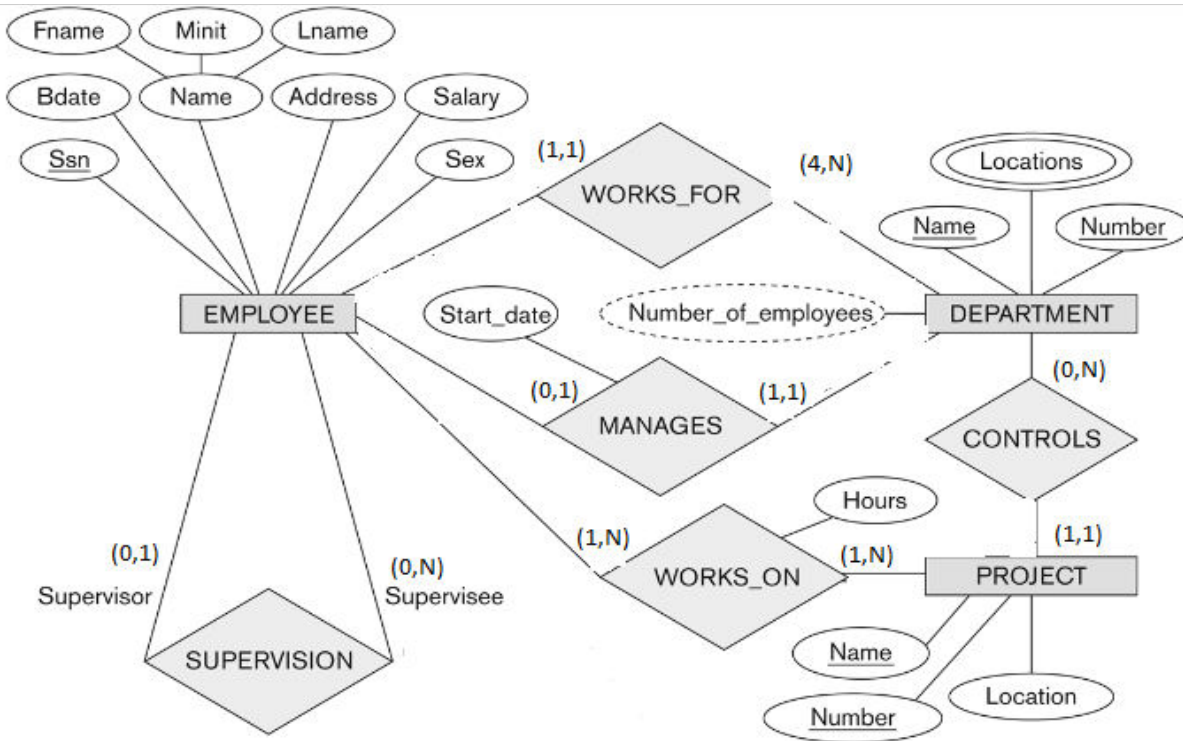
Date of Submission: 09/08/19

1. Define a problem statement for Hospital Management System and also list all the entities and relationship sets from the definition. (LO1) (BTL-1,2)
2. Create a problem statement for Banking System and also list all the entities and relationship sets from the definition. (LO1) (BTL-1,2)
3. Construct an ER diagram for university database consisting of 4 entities. Student, Department, Class, Faculty and convert it to tables. A student has a unique id; the student can enrol for multiple classes and has at most one major. Faculty must belong to department and faculty can take multiple classes. Every student will get a grade for the class he/she was enrolled. (LO2) (BTL-6)
4. Given the following relations: (LO2) (BTL-3)
Vehicle (reg_no, make, colour)
Person (eno, name, address)
Owner (eno, reg_no)
Write expressions in the relational algebra to answer the following queries:
 - i. List the reg_no of vehicles owned by John.
 - ii. List the names of persons who own maruti car.
 - iii. List all the red coloured vehicles.
5. With reference to figure below list and explain the Attributes, Keys, and Relationship types. (LO2) (BTL-2)



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