

<b>RIT</b> ISTE230	Introduction to Database & Data Modeling PE #09 November 14 See Step 4 on Page 2	Fall 2022 (2221)
-----------------------	---	---------------------

**Name:** Please print Last name (Lastname, Firstname) \_\_\_\_\_

Practice Exercise 9

Posted First week of school

Due Monday November 14, 2022 @ 11:59pm

Assignment box PE09

You can only turn in the PE once. You will not be able to re-do any PE if you have errors.

### Special Cases of Referential Integrity:

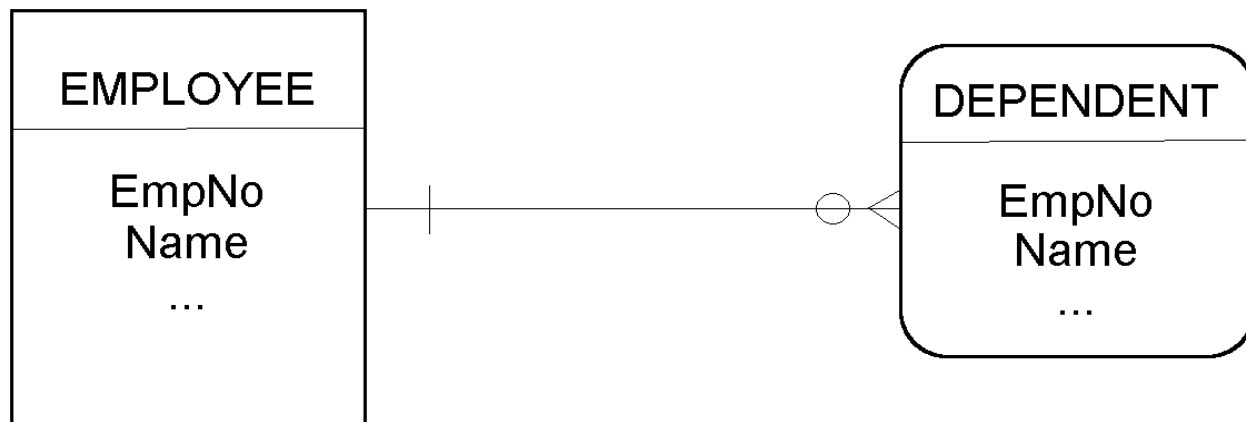
#### ■ Case 1: Strong entities

An entity type that has no existence dependency is called strong entity. It can exist without depending upon the existence of another entity. The strong entity is also referred to as parent, or owner, or dominant.

#### ■ Case 2: Weak entities

Thus, an instance of a weak entity cannot exist independently but depends on the existence of another entity (strong entity) instance.


Design a database with two tables to demonstrate the difference between Strong entities and weak entities. (Do **NOT** use this EMPLOYEE & DEPENDENT example since Jim did this example in class)



Please **DO NOT** create this exact example, come up with your own example of a strong and weak entity. You are not permitted to turn in any example that I used in class. Many other samples will be provided in lecture.

EMPLOYEE(EmpNo, Name, department, startingYear, benefits, ssn)

DEPENDENT(EmpNo, Name, Birthdate, sex, ssn...)

 ISTE230	<p>Introduction to Database &amp; Data Modeling</p> <p>PE #09</p> <p>November 14</p> <p>See Step 4 on Page 2</p>	<p>Fall 2022 (2221)</p>
---	--	-----------------------------

Create a Script to create the 2 tables (one strong entity, and one with a weak entity). Also, create a log file “tee” when creating the database and inserting some test data.

**Create a UML diagram for this database or create an ER diagram for this PE.** UML using Workbench is the best diagram.

Attach the diagram to the assignment box.

After some test data was inserted into the tables, select all the records from the weak relation (Dependent) and corresponding key in the strong table (Employee). Please do multiple Queries.

YOUR TEE FILE SHOULD BE NAMED -> **LASTNAME.txt**

Your TEE file should contain the following 3 Queries described below

Attach tee files(MUST USE –verbose option) on every assignment.

### **Queries that I want for Practice Exercise 09:**

- 1) Query of all the records of the STRONG entity
- 2) Query of all the records of the WEAK entity
- 3) Query of selective data from BOTH the STRONG entity & WEAK entity
  - a. Produce a MEANFULL report that contains data from both the
  - b. Strong entity & Weak entity.
  - c. This report must be LOGICAL, and display data that your boss might want to read every Friday.
  - d. -- This query you are creating for your boss every Friday must
  - e. -- be a PROJECTION of columns. Do not write SELECT \* FROM ...
- 4) Use [www.lucid.app](http://www.lucid.app) create an ER diagram of your strong and weak tables. Covert your diagram to PDF and attach this PDF to the Assignment Box / Drop Box.