1. What is the ER diagram and its purpose?

ERD is a graphical representation of your entire database

Its purpose is:

- Break down data to show the relationship between different entities embedded within said data.
- Attributes that can distinctly mark an entity.
- Attributes that can distinctly mark an entity in other entities.

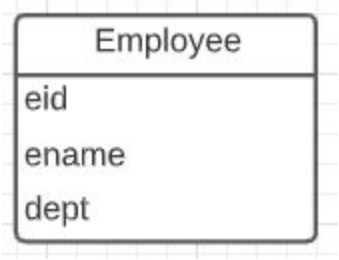
2. In which phase it is used in software engineering?

DFD (data flow diagram): it is used in software engineering.

3. Define the different components used in the ER diagram (Entity, Relationship, Cardinality etc).

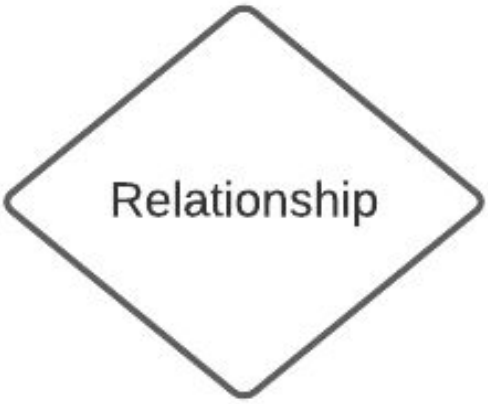
Entity:

- It can be a person, object, thing etc.,
- Entity can be represented as a table
- Represented in Rectangles
- Will contain a primary key attribute



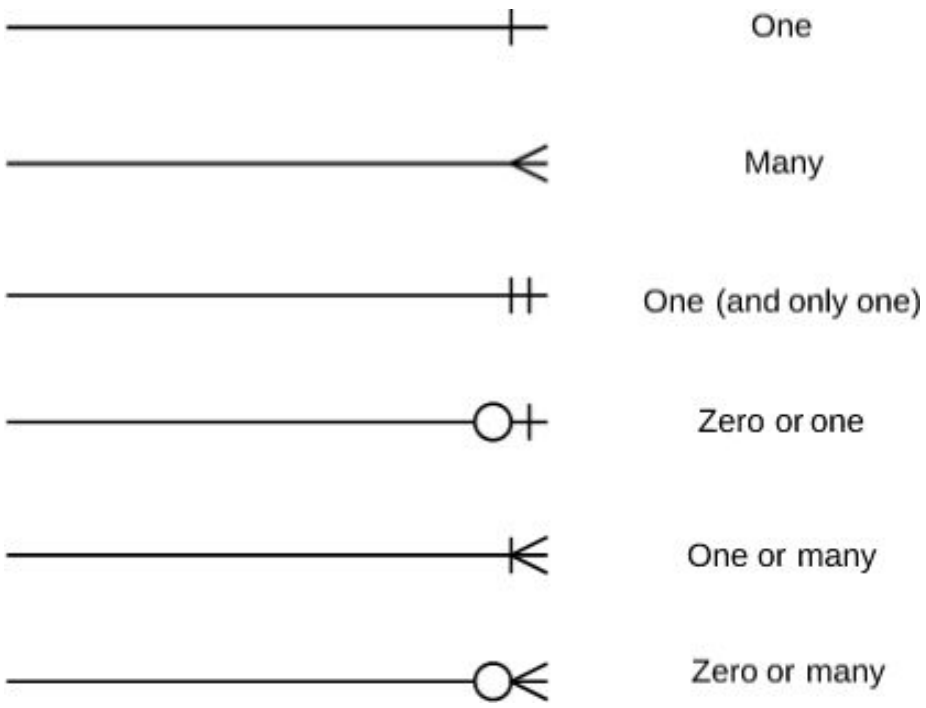
Relationship:

- Used to denote the relationship between classes
- Denoted with a diamond symbol



Cardinality:

- Possible number of occurrences in one entity which is associated with the number of occurrences in another
- Basically there are three types of cardinalities available:
    - One to One
    - One to Many
    - Many to Many
- In ERD cardinality explained with Crow’s foot



4. What is the Data Flow diagram and its purpose?

DFD is a graphical depiction of how data is flowing inside the system

Provides data as well as functionality to software designers

Its purpose is:

- used by information technology professionals and systems analysts to document and show users how data moves between different processes in a system.
- Analysts generally start with an overall picture and then move on to the finer details of each process.

5. In which phase it is used in software engineering?

Process: it is used in software engineering.

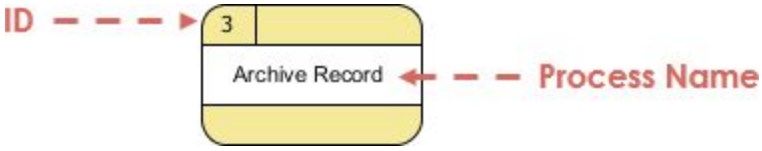
6. Define the different components used in the DFD (External entities, Process, Data sources, Flow, etc).

External entities:

- External object that consumes or provides data to the system
- Hardwares, sensors etc are external objects
- FB share, authentication

Process:

- Transforms data Gets data as inputs and converts into output)
- Must not be repeated twice

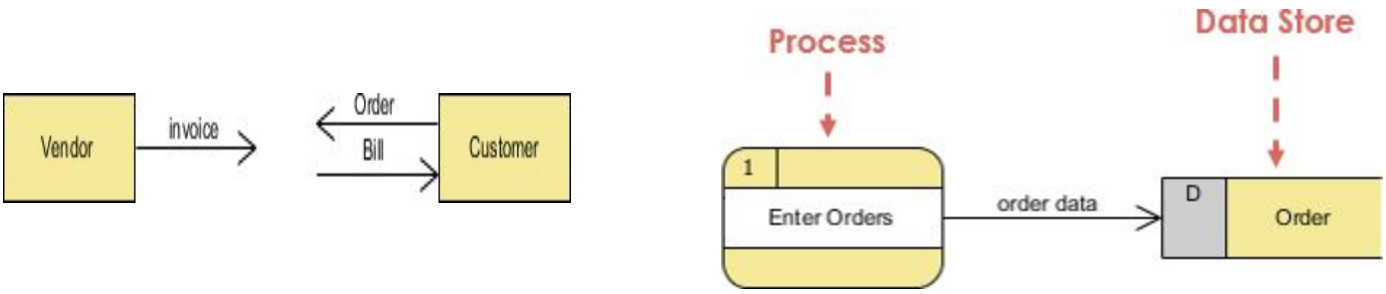


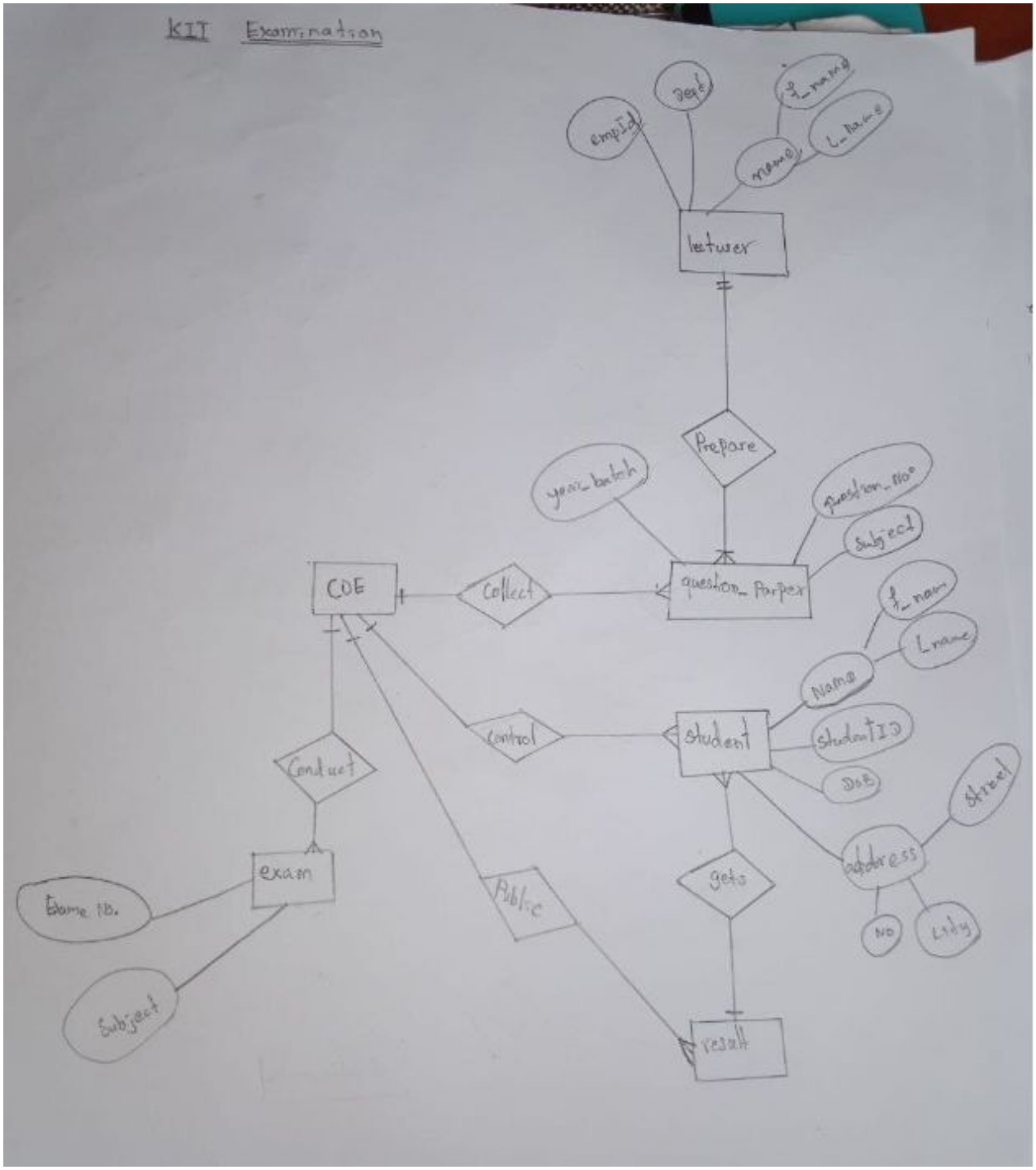
Data sources:

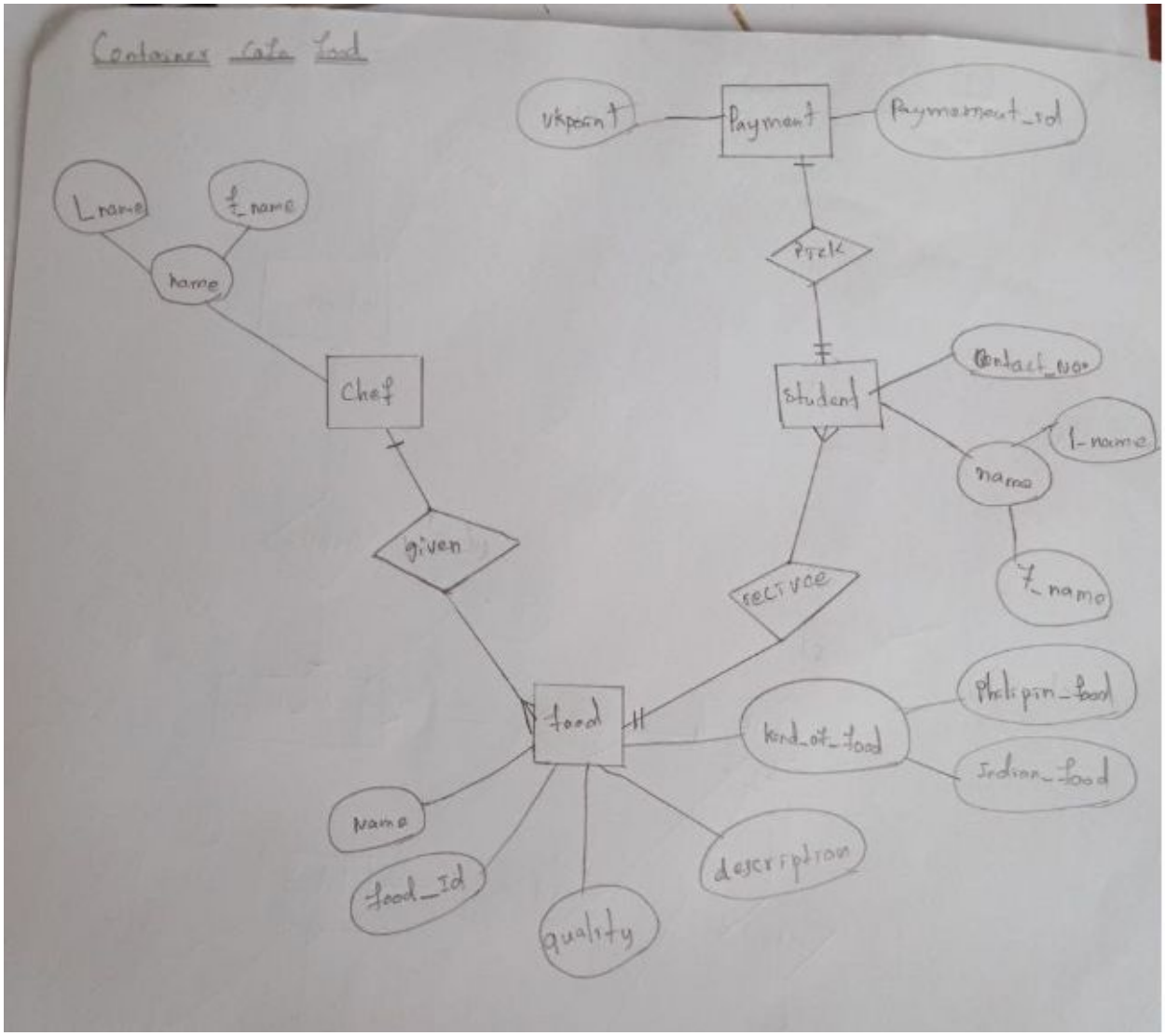
- Anything that stores data (DBs, files,)

Flow:

- Not bidirectional arrows allowed (Use separate arrows for incoming and outgoing data)




KII Examination
Dept
F_name
EmpId
L_name
name
lecturer
Prepare
year_batch
question_No
Subject
question_Paper
COE
Collect
F_name
L_name
Name
Control
student
StudentID
DoB
Conduct
exam
Exam ID.
Subject
Public
gets
address
Street
No
City
result


Container Cafe food
Payment
Payment_id
Pick
Student
Contact_no
name
l_name
f_name
Chef
given
recive
food
kind_of_food
Philipin_food
Indian_food
name
food_Id
quality
description