

Q1. Identify the entities and attributes for this problem statement.

-- An entity is a real-world object



-- according to my er diagram these are the following entities

1. online survey : Technically this entity exists
2. product : Because this will contains many attributes like its name , type , rating
3. customer : This is also an entity because this will contains name, email etc
4. buyer : Buyer will also be an entity because he will give an rating, name , phone_no
5. feedback : feedback are generated via survey and of product
6. survey : survey only happens if we have product
7. question : for survey to happens you should have some question
8. answer : Based on question ans is generated so entity
9. purchased : We need to maintain the separate who purchased and what.

Q2. Attributes to be defined and explained.

- multivalued attributes : contact_no Because there can be more than one number for a customer or buyer
- composite attributes : name and address . Because name can be sub divided into first name and last name
- refer the diagram for each entity set

Q3. Identify the key

- primary key  (ref diagram)
- foreign key 

Q4. Relationships to be defined and explained well

1:1 relations are

- online survey and product : Technically this only exists in er diagram not in schema. survey are performed only for the products if it exists
- product and feedback: For on product there exists only on feedback given by the buyer if he buys
- customer and survey: When customer purchased product a survey is performed for the products
- buyer and feedback: For one buyer there exists only one feedback for a product.
- question and answer : one question will have one answer

1:N relations are

- customer and purchased: One customer can purchased many products
- customer and product: one customer can have many products
- buyer and products: one buyer can buys many products
- survey and feedback: one survey can have many feedback about products
- survey and question: one survey can have many question based on which one feedback is generated
- feedback and answer : feedback are created based on multiple answers

M:N relations are

- purchased and product: One customer can purchased many products