

Question and Answers

Data are known ____

- a. Information
- b. Facts
- c. Decision
- d. Tables

Data can be represented in ____

- a. Alphabets and special characters
- b. Only digits
- c. Only alphabets and digits
- d. Alphabets, digits and special characters

File is a collection of related data stored in secondary memory. All the following are disadvantages of the file organization approach except

- a. Data is related
- b. Difficulty in accessing data
- c. Data isolation
- d. Integrity Problems

What is the full form of DBMS?

- a. Data of Binary Management System
- b. Database Management System
- c. Database Management Service
- d. Data Backup Management System

What is a database?

- a) Organized collection of information that cannot be accessed, updated, and managed
- b) Collection of data or information without organizing
- c) Organized collection of data or information that can be accessed, updated and managed
- d) Organized collection of data that cannot be updated

Which of the following is a feature of the database?

- a) No-backup for the data stored
- b) User interface provided
- c) Lack of Authentication
- d) Store data in multiple locations

Which of the following is not a function of the database?

- a) Managing stored data
- b) Manipulating data
- c) Security for stored data
- d) Analysing code

Which of the following is a function of the DBMS?

- a) Storing data
- b) Providing multi-users access control
- c) Data Integrity
- d) All of the above

What does an RDBMS consist of?

- a) Collection of Records
- b) Collection of Keys
- c) Collection of Tables
- d) Collection of Fields

Entity is a thing or object in the ____

- a) Entity relationship diagram
- b) Real world
- c) Enhanced entity relation diagram
- d) Database

In a given ERD scenario, entities are mostly identified using ____

- a) Noun
- b) Their cardinality
- c) Their relationship type
- d) Proper noun

Logical data refers to the data for the table created by the user in the _____

- a. Primary memory
- b. Secondary memory
- c. All of the above
- d. None of the above

Physical data refers to the data for the table created by the user in the _____

- a. Primary memory
- b. Secondary memory
- c. All of the above
- d. None of the above

The three level of architecture in the DBMS are

- a. ERD, EER, SQL
- b. Entity, attribute, cardinality
- c. External, conceptual, internal
- d. DBA, DA, DBMS

Application programmers and online users are example of database users.
Another example of database user is ____ user

- a. MySQL
- b. Naïve
- c. ERD
- d. Entity

All the following are database language except ____

- a. Data definition language
- b. Data manipulation language
- c. Data control language
- d. Database administrator language

Data definition language enable users to ____

- a. Create tables in the database
- b. Manipulate table records in the database
- c. Specify user authorization to the table data
- d. None of the above

Data control language enable users to ____

- a. Create tables in the database
- b. Manipulate table records in the database
- c. Specify user authorization to the table data
- d. None of the above

Data manipulation language enable users to ____

- a. Create tables in the database
- b. Manipulate table records in the database
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- d. None of the above

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Which of the following gives a logical structure of the database graphically?

- a) Entity-relationship diagram
- b) Entity diagram
- c) Database diagram
- d) Architectural representation

The entity relationship set is represented in E-R diagram as

- a) Double diamonds
- b) Undivided rectangles
- c) Dashed lines
- d) Diamond

An entity set that cannot exist without the existence of another entity is termed as a _____

- a) Strong entity set
- b) Variant set
- c) Weak entity set
- d) Variable set

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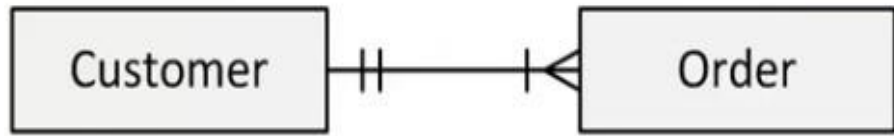
Weak entity set is represented as ____

- a) Underline
- b) Double line
- c) Double diamond
- d) Double rectangle



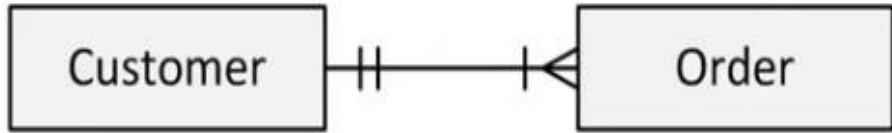
The relationship between Customer and Order is ____

- a. Many-to-Many
- b. Zero-to-Many
- c. Zero-to-One-to-Many
- d. One-to-Many



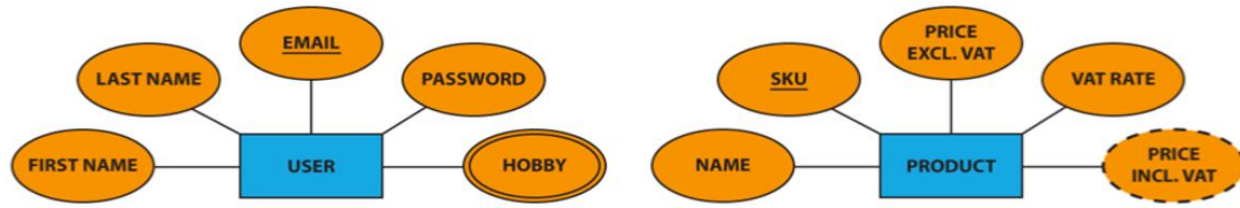
The maximum cardinality is ____ for Customer and ____ for Order

- a. Many and One
- b. One and Many
- c. Zero and Many
- d. Many and Many



The minimum cardinality for both entities is _____

- a. Many
- b. Optional
- c. Optional or One
- d. one

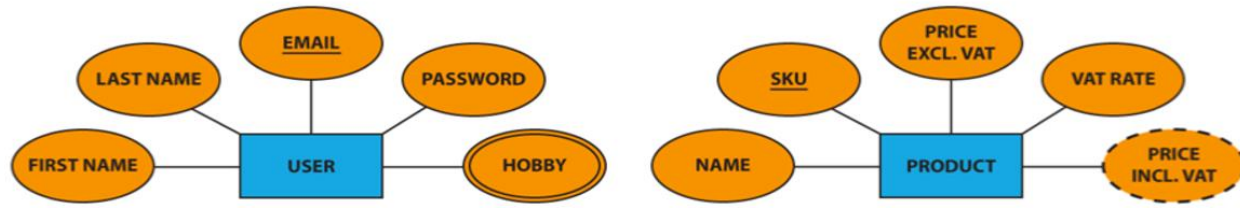


The ____ attribute is a multivalued attribute

- a. Hobby
- b. Price
- c. SKU
- d. Email

The ____ attribute is a derived attribute

- a. Hobby
- b. Price
- c. SKU
- d. Email



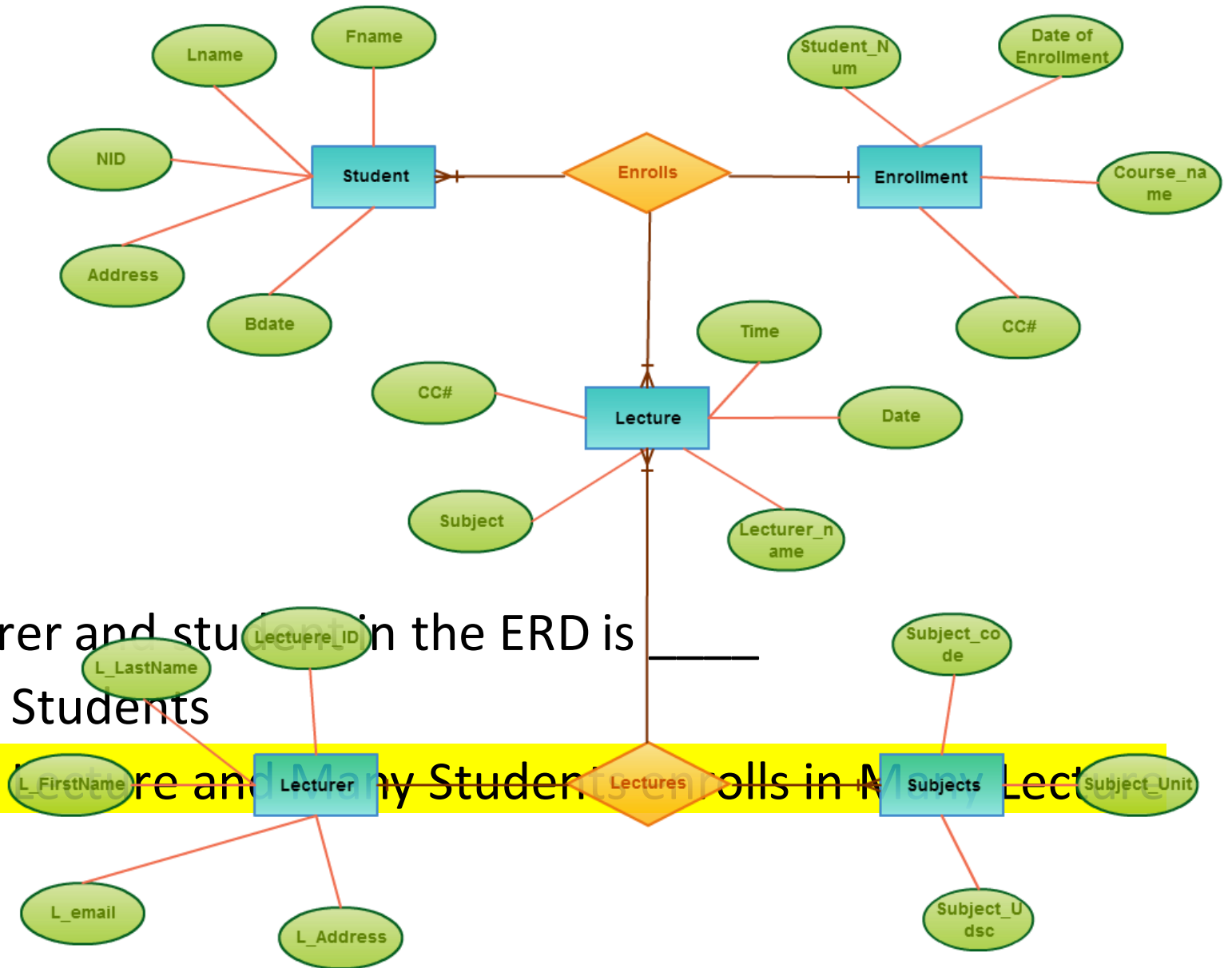
The possible attribute in the Product entity that could be used as foreign key in the User entity is _____

- a. Hobby
- b. Price
- c. **SKU**
- d. Email

The possible attribute in the User entity that could be used as foreign key in the Product entity is _____

- a. Hobby
- b. Price
- c. SKU
- d. **Email**

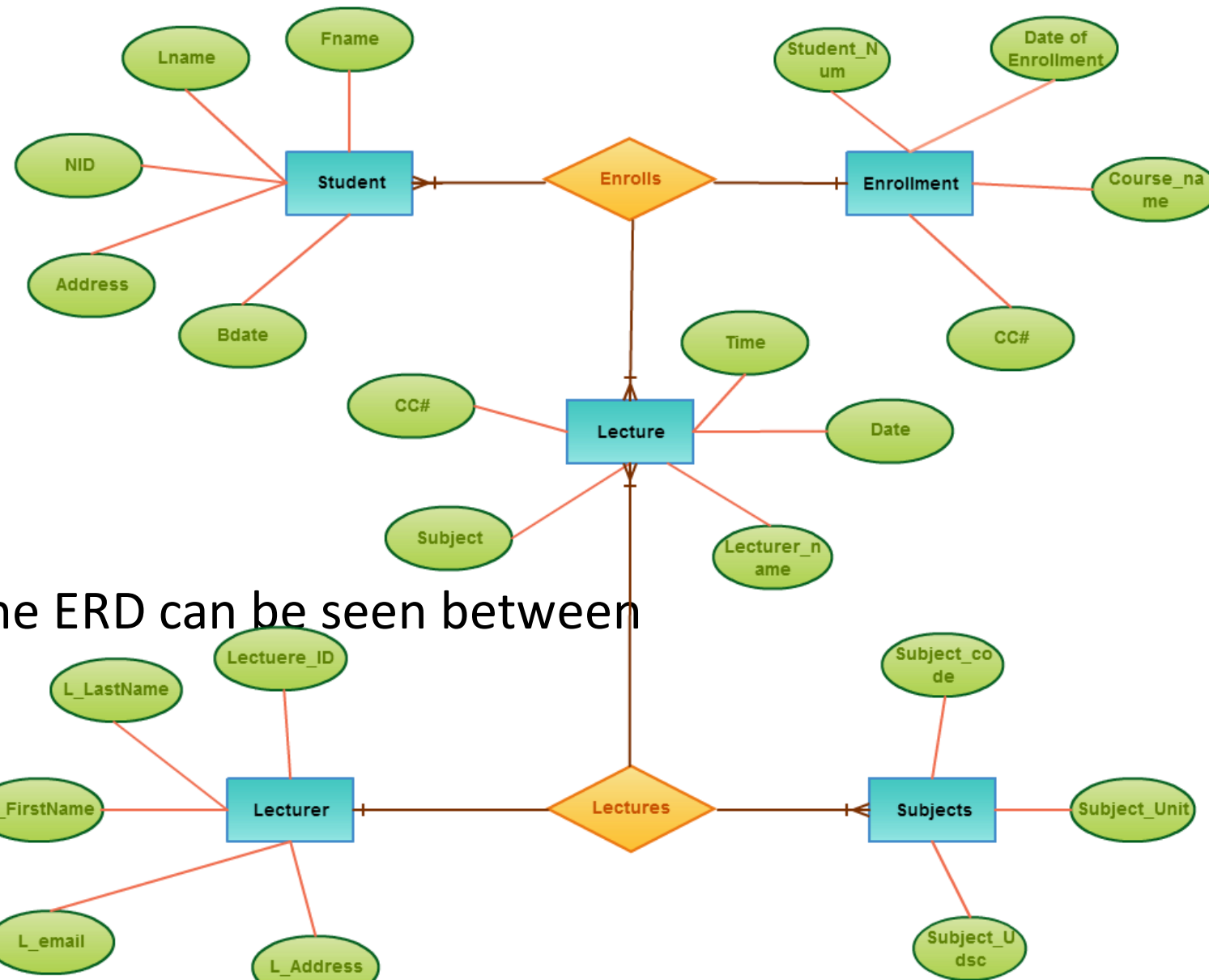
ER DIAGRAM FOR STUDENT ENROLLMENT SYSTEM



The relationship between Lecturer and student in the ERD is

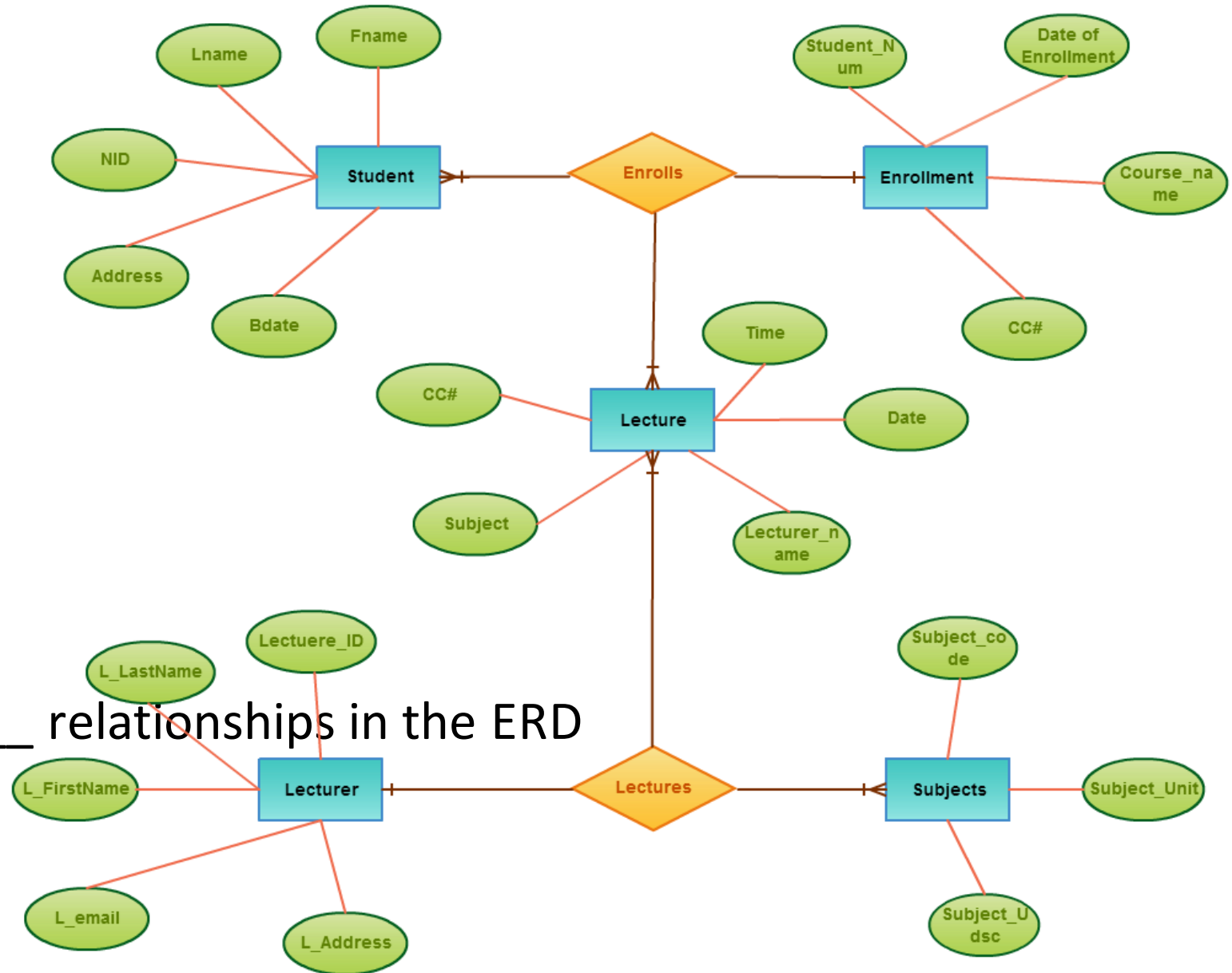
- One Lecturer lectures Many Students
- One Lecturer lectures Many Students and Many Students enrolls in Many Lectures
- Only A
- Only B

ER DIAGRAM FOR STUDENT ENROLLMENT SYSTEM



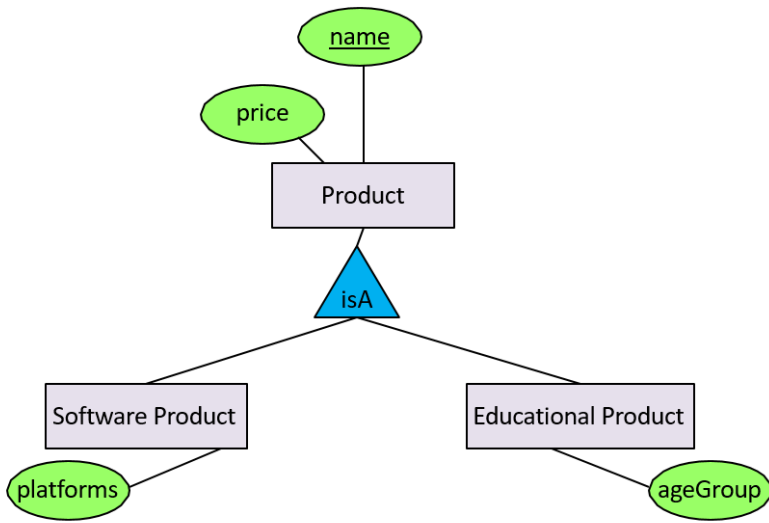
The Many-to-Many relationship in the ERD can be seen between

- a. Subjects and Lecture
- b. Student and Lecture
- c. Only A
- d. A and B



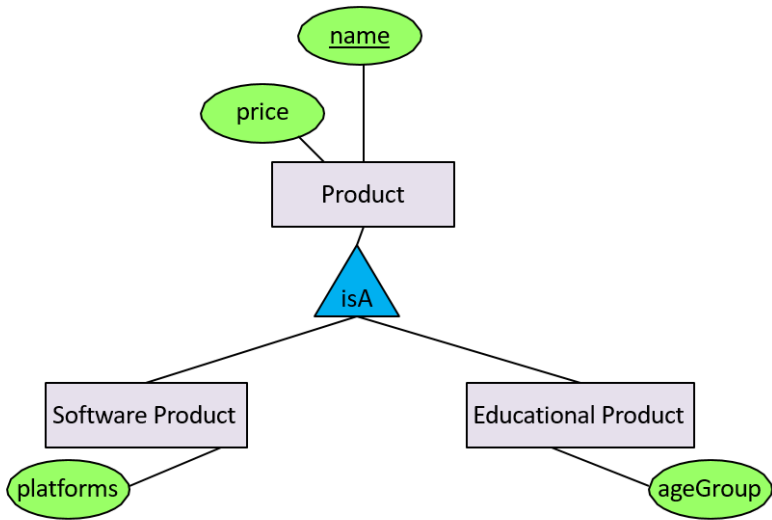
There are 5 entities and ____ relationships in the ERD

- a. 1
- b. 2
- c. 3
- d. 4



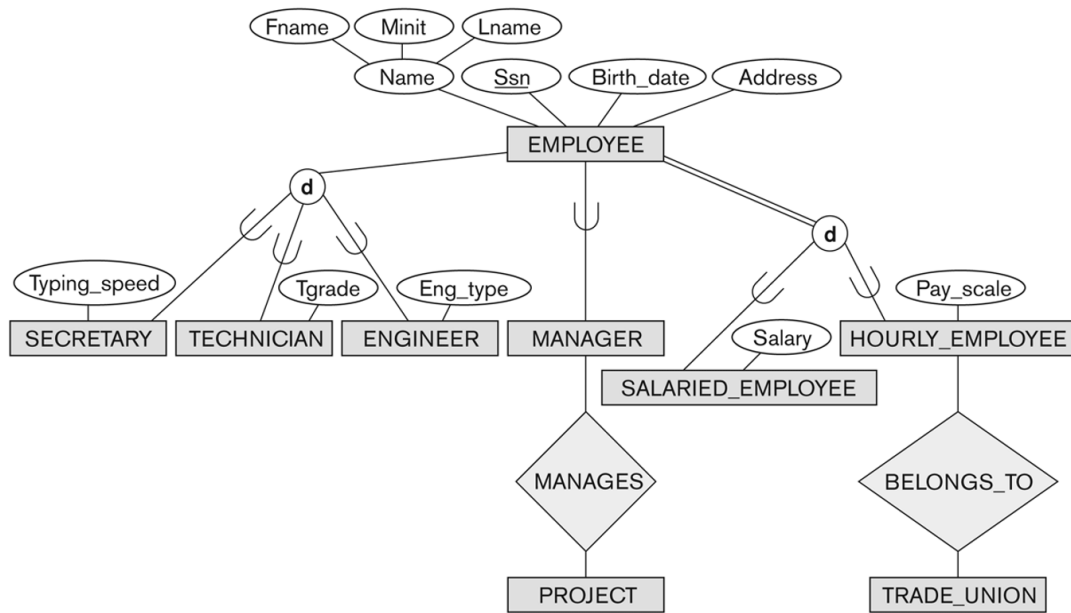
Which of the following is not true about the model

- a. Software product is a subclass of product
- b. Product “is a” software product
- c. Educational product is a child of product
- d. Product is a generalized superclass



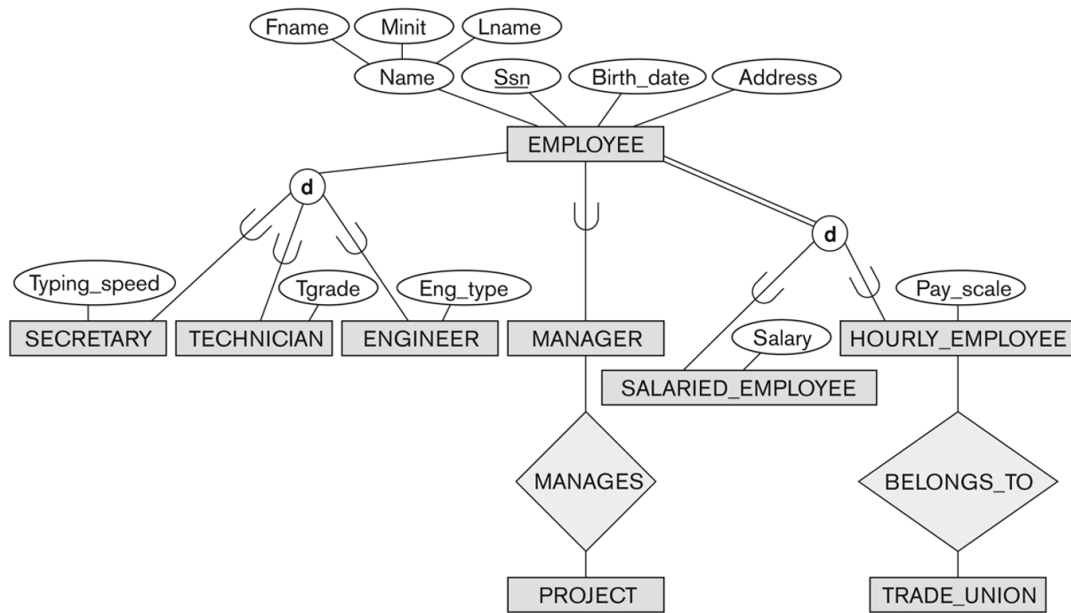
The software product entity has the following attributes

- a. Name, price, and ageGroup
- b. Price, name, platforms, and ageGroup
- c. Price, name, and platforms
- d. Product, software product, educational product



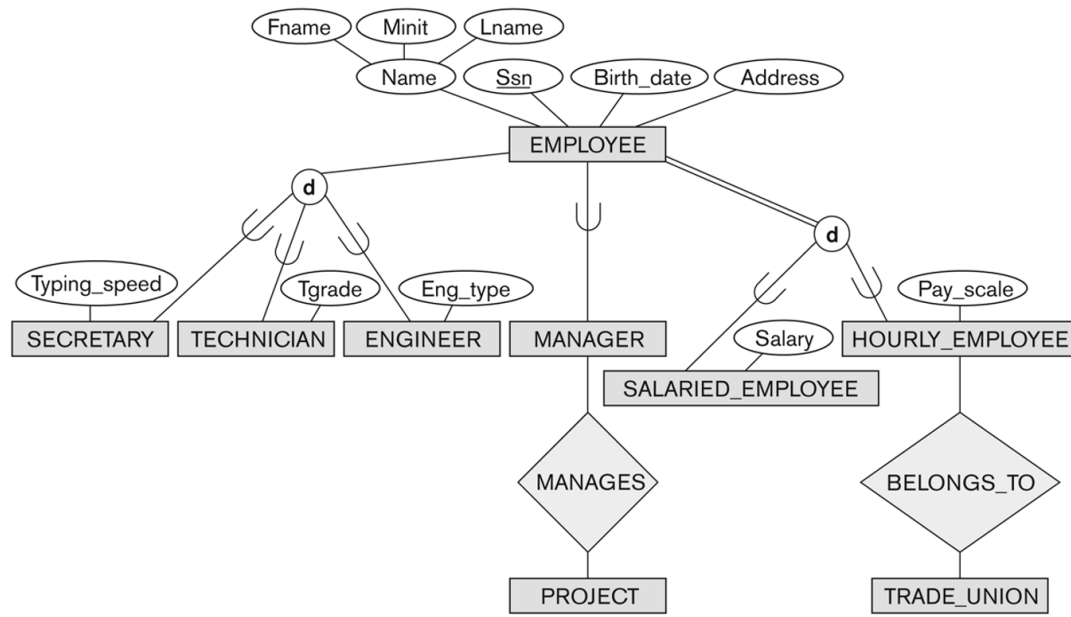
How many specialization of Employee are shown in the EERD

- a. 4
- b. 5
- c. 7
- d. 2



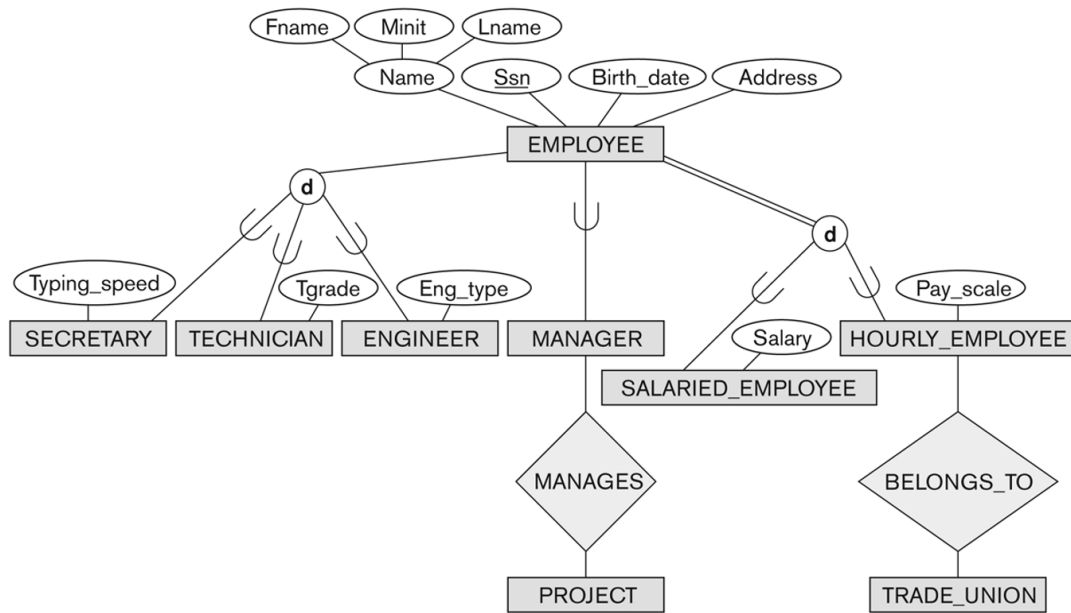
___ is not a specialization of Employee

- a. Secretary
- b. Manager
- c. Engineer
- d. Project



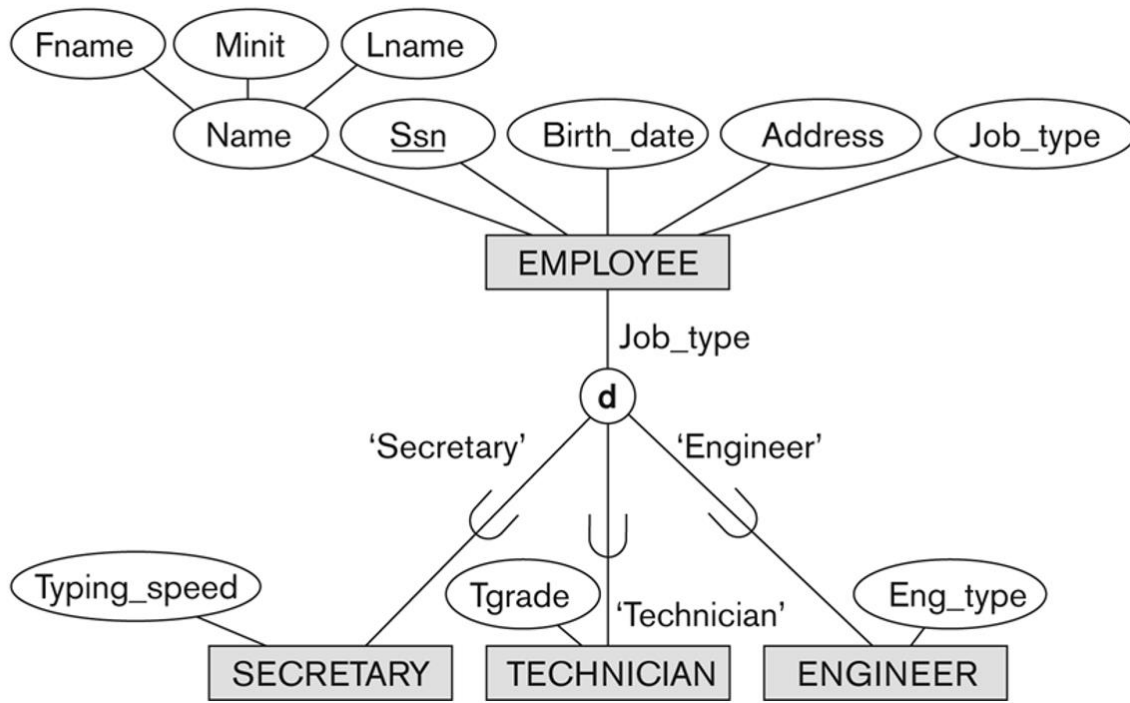
Without counting any subclass entity, how many entities are shown in the EERD?

- a. 4
- b. 5
- c. 3
- d. 2



The following are local attributes belonging to the Employee subclasses

- a. **Typing_speed, Tgrade, and Eng_type**
- b. Salary, Pay_scale, and Employee
- c. Employee, Project, and Trade_union
- d. Employee, Manager, and Project



The 3 subclasses of Employee are all attribute defined specialization based on the ____ attribute

- a. Ssn
- b. Name
- c. Job_type
- d. disjoint

The basic constraints that can apply to specialization/generalization are

- a. Disjoint, IS-A, and Overlapping
- b. Total and Partial
- c. Specialization and Generalization
- d. Disjointness, Overlapping, and Completeness

If the subclasses are disjoint, then an entity occurrence can be a member of ____

- a. Only one of the subclasses
- b. Many subclasses
- c. All of the above
- d. None of the above

___ applies when an entity occurrence may be a member of more than one subclass

- a. **Overlapping constraint**
- b. Disjoint constraint
- c. Total constraint
- d. Partial constraint

Which of the following is a disjoint constraint

- a. {mandatory}
- b. **{or}**
- c. {and}
- d. {optional}

Which of the following is an overlapping constraint

- a. {mandatory}
- b. {or}
- c. {and}
- d. {optional}

Which of the following is a completeness total constraint

- a. {mandatory}
- b. {or}
- c. {and}
- d. {optional}

A subclass with more than one superclass is called a ____

- a. Tree subclass
- b. Specialized subclass
- c. Shared subclass
- d. Generalized subclass

In a lattice or hierarchy, a subclass inherits attributes not only of its direct superclass, but also of all its predecessor

- a. Subclasses
- b. Superclasses
- c. All of the above
- d. None of the above

What will be the output of the following MySQL command?

```
SELECT*  
FROM employee  
WHERE title='HEAD TELLER';
```

- a. All columns and rows belong to table employee
- b. All columns but only those rows which contain 'HEAD TELLER' as a "title"
- c. All columns don't belong to table employee
- d. None of the mentioned

What will be the output of the following MySQL command?

```
SELECT*  
FROM employee  
WHERE (title='HEAD TELLER') AND (start_date=2013-01-24);
```

- a. All columns and rows belong to table employee
- b. All columns but only those rows which contain 'HEAD TELLER' as a "title" and 2013-01-24 as a "start_date"
- c. All rows belong to table employee
- d. None of the mentioned

What will be the output of the following MySQL command?

```
SELECT emp_id, fname, lname  
FROM employee  
WHERE title='HEAD TELLER' AND start_date=2008-11-24;
```

- a) All columns
- b) Only those columns which are mention with “SELECT” clause
- c) Columns mention with “SELECT” clause and only those rows which contain ‘HEAD TELLER’ as a “title” and start_date as 2008-11-24
- d) None of the mentioned

What will be the output of the following MySQL command?

```
CREATE table PERSON(ID int(10), Name varchar(20), Phone varchar(10), Address varchar(100));
```

- a) A table within database with new name will be created
- b) New table named person without attributes will be created
- c) A Person table with four attributes will be created
- d) None of the above

What MySQL query will generate the following table?

CUST_NAME	CUST_COUNTRY	OUTSTANDING_AMT
Micheal	USA	6000.00
Albert	USA	6000.00

- a. `select CUST_NAME, CUST_COUNTRY, OUTSTANDING_AMT FROM customer WHERE CUST_COUNTRY = 'USA' AND OUTSTANDING_AMT > 3000;`
- b. `select CUST_NAME, CUST_COUNTRY, OUTSTANDING_AMT FROM customer WHERE CUST_COUNTRY = 'USA' AND OUTSTANDING_AMT >= 3000;`
- c. A and B
- d. None of the above

What will be the output of the following MySQL command if we consider the table below?


```
SELECT sum(outstanding_amt), max(outstanding_amt), min(outstanding_amt), avg(outstanding_amt) FROM CUSTOMER;
```

CUST_NAME	CUST_COUNTRY	OUTSTANDING_AMT
Micheal	USA	6000.00
Albert	USA	6000.00

- a. 600, 6000, 12000, and 600
- b. 6000, 12000, 6000, and 9000
- c. 12000, 6000, 6000, and 6000
- d. 3000, 6000, 12000, and 600

Table: Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE



customer_id	first_name	last_name	age	country
1	Johnny	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Harry	Potter	31	USA

The following query will add the Harry Potter record to the table on the right-hand side.

- Alter table customer add customer_id = 5, first_name = Harry, last_name = Potter, age = 31, and country = 'USA';
- Insert into customer values(5, 'Harry', 'Potter', 31, 'USA');
- Insert into customer values(5, 'Harry', 'Potter', 31, 'USA');
- Insert into customer value(5, 'Harry', 'Potter', 31, 'USA');

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5	Harry	Potter	31	USA

The following query will change John from the left-hand table to Johnny as in the right-hand table

- Alter table customer change first_name = 'Johnny' where first_name = 'John';
- Update from customer first_name = 'Johnny' where customer_id = 1;
- Alter table customer pdate first_name = 'Johnny' where customer_id = 1;
- Update customer set first_name = 'Johnny' where customer_id = 1;