1. Describe the table, what information is it storing?

Answer:

The table is storing information about a restaurant. There are different attributes used to store relative information which are described below.

Attribute	Datatype	Information
id	mediumint<8>	It is a primary key that uniquely identifies a value. It will increase automatically if more information is added as auto_increment is assigned to it. It can store a maximum of 8 integers. It can't be null
mid	mediumint<9>	It is an attribute which is uniquely representing a customer name. It can store a maximum of 9 integers. It can be null
mname	varchar<255>	It is an attribute that is storing the name of customers. It can store a maximum of 255 characters. It can be null
mdob	varchar<255>	It is storing information about dob of the customers where the maximum characters that can be stored is 255. It can be null
orderid	varchar<36>	Orderid is storing information about the order made. 36 characters are the maximum value it can hold. It can't be null
ordertype	varchar<255>	It stores information about what type of order is made. It can store a maximum of 255 characters. It can be null
cscasas_rrwe	varchar<36>	It is used to store information about the receipt of payment. The maximum characters it can hold Is 36. It can't be null

Null means no value can be stored as well. 0 and null is different there may be a scenario where the information cannot be provided or some other reasons and it can stay null. But no null means there must be a value or else it will be an error in database.

2. **Suggest better names for the table and its columns.**

Answer:

The better name would be Customer_table as it is storing information about customers. The preferred name for the attributes would be

id	Id
mid	Customer_ID
mname	Customer_Name
mdob	DOB
orderid	Order_ID
ordertype	Order_Type
Cscasas-rrwe	Receipt_ID

3. **What form is this table in? Explain your answer.**

Answer:

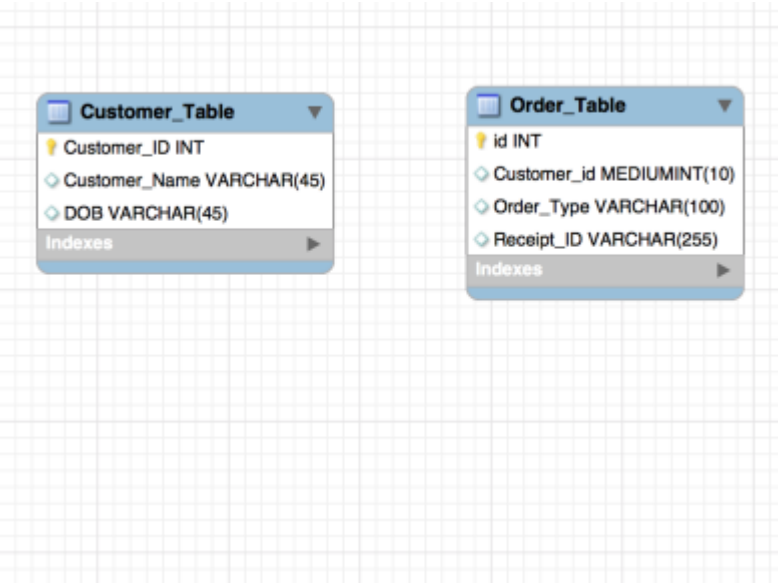
The given table is in 1NF. The conditions for table to be in 1NF are as follows:

- A relation is in 1NF if and only if, it contains no repeating attributes or groups of attributes and has a primary key.
  In our case the attributes used are
  id,mid,mname,ordered,ordertype,cccasasrrwe.
  We can see that we don't have any repeating attributes and the primary key is id

4. Suggest how would you restructure this information to

reduce data redundancy and improve data integrity.

Answer:



One of the best alternative to reduce data redundancy and to improve data integrity is to have two tables Customer_Table and Order_Table.
Customer_Table
It will have Customer_ID which will uniquely represent the customer which we have in our database. In general, it will store information's about the customer. So, the information about a customer is not repeated every single time the order is made.
Order_Table
id is the primary key that will be assigned to every new order made and other attributes will store their respective information's. The order_table will only store the information related to the order not every single details of the customer for that we have Customer_id that will act as a foreign key which references to Customer_ID in customer_table.

5. Find at least two anomalies in this data set.

Answer:

- The duplicate information's have unique id.
- At the id 700 where Sadie reed made an order of c_salad we need to use insertion anomaly in entity Cscasas-rrw as it is blank.
- Incorrect spelling of dessert2 we need update anomaly to correct that.
- og must be deleted from the database because the information does not look relevant to our database because the name is weird and ordertype is a vodka and it is only ordered once. By looking at our database the information is quite weird.
- We have 18 DOB for 17 mname.
- Mark ruffle has two DOB out of which 1700-0-1 is incorrect and delete anomaly should be used