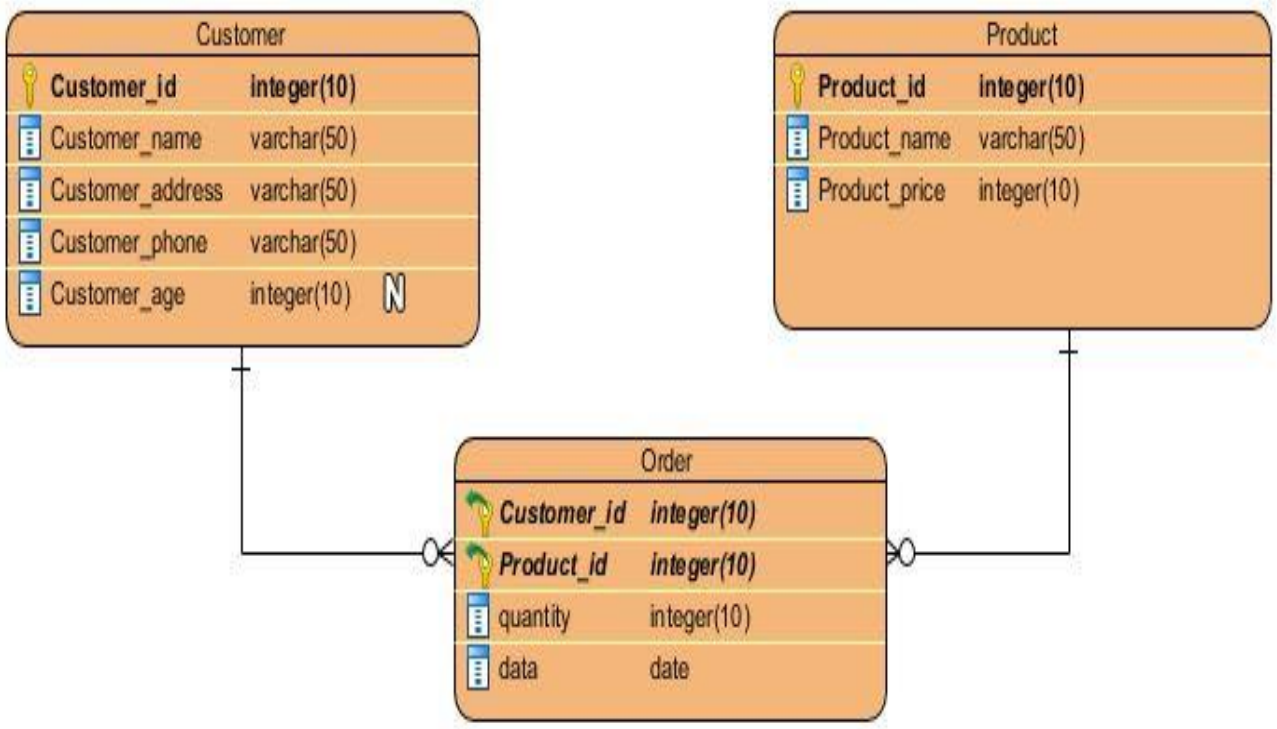
WEEK_4_LAB_1

Join Of Table(Many-to-Many):

ER-Diagram: SoftSale



tbl_Customer

Customer_id(PK)	Name	Address	Phone	Age
1001	Buggy	Orange town	****	24
1002	Rob lucci	Enies Lobby	****	26
1003	Doflamingo	Dressrosa	****	23
1004	Kaido	Wano	****	44

Tbl_Product

Product_id(PK)	Product_Name	Product_price
001	Devil Fruit	20000
002	Ship	50000
003	Straw Hat	40000
004	Sword	75000

Now , Relation should be maintained between two tables:

tbl_Order

Customer_id(Fk)	Product_id(fK)	Quantity	Date
1001	002	3	1994-01-13
1001	004	2	2013-03-12
1003	002	1	2019-12-11
1003	003	4	2019-12-12
1003	001	3	2015-12-12
1002	002	5	2019-12-11
1002	001	3	1994-01-13
1004	001	2	2019-12-11
1004	002	3	1994-01-13
1004	003	3	2015-12-12
1004	004	2	2019-12-11

⇨ So, All data and relation is maintained to database

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1002	001	3	1994-01-13
1004	001	2	2019-12-11
1004	002	3	1994-01-13
1004	003	3	2015-12-12
1004	004	2	2019-12-11

Exercise 1:

1)Find the customer name and address those whose age is greater than 25

2)Find the product name and its price whose price are greater than 40000

3) Find the product name whose name starts with s

4)Show the customer details with respective to their age in descending order

Exercise 2:

1)Find the product ordered by every customer from above relational database

```
select Name,Address,Product_Name,Product_price,Quantity,Date
from tbl_customer as c, tbl_product as p, tbl_order as o
where c.customer_id=o.customer_id and p.product_id=o.product_id;
```

2) Find the product details order by Doflamingo

```
select Name,Address,Product_Name,Product_price,Quantity,Date
from tbl_customer as c, tbl_product as p, tbl_order as o
where c.customer_id=o.customer_id and p.product_id=o.product_id
      and name='Doflamingo';
```

3) Find the product details order by Kaido and product price must be greater than equal to 50000

4) Find the total number of order placed by Customer Buggy

5) Show total product quantity purchased by Rob lucci

6) Show the customer name and count their Number of order (hint: Use group by)

7) Show the customer name and count their

Number of order and number of orders must be greater than 2

8) Find the product ordered by every customer from above relational database as the order done in recent date must be in top

SQL statements

The Two main categories of SQL statements are as follows

DDL (Data Definition Language)

DDL is abbreviation of Data Definition Language. It is used to create and modify the structure of database objects in database

1. CREATE – create a new Table, database, schema
2. ALTER – alter existing table, column description
3. DROP – delete existing objects from database

DML (Data Manipulation Language)

DML statements affect records in a table. These are basic operations we perform on data such as selecting a few records from a table, inserting new records, deleting unnecessary records, and updating/modifying existing records.

DML statements include the following:

SELECT – select records from a table

1. INSERT – insert new records
2. UPDATE – update/Modify existing records
3. DELETE – delete existing records

Using `UPDATE` SQL command

`UPDATE` command is used to update any record of data in a table. Following is its general syntax,

```
UPDATE table_name SET column_name = new_value
WHERE some_condition;
```

Question:

Update the tbl_customer and change the old address of buggy to new address ‘KTM’

`DELETE` command

`DELETE` command is used to delete data from a table.

Following is its general syntax,

```
DELETE FROM table_name;
```

The above command will delete all the records from the table **student**.

Delete a particular Record from a Table

In our **student** table if we want to delete a single record, we can use the `WHERE` clause to provide a condition in our `DELETE` statement.

```
DELETE FROM table_name WHERE condition;
```

`DROP` command

`DROP` command completely removes a table or database. This command will also destroy the table structure and the data stored in it. Following is its syntax,

```
DROP TABLE table_name
```

```
DROP database database_name
```

SQL: `ALTER` command

`alter` command is used for altering the table structure, such as,

- to add a column to existing table
- to rename any existing column
- to change datatype of any column or to modify its size.
- to drop a column from the table.

`ALTER` Command: Add a new Column

Using `ALTER` command we can add a column to any existing table. Following is the syntax,

```
ALTER TABLE table_name
ADD column_name datatype;
```

Question:

➔ Add new column the tbl_Customer named shipping_address and insert value

`ALTER` Command: Drop a Column

`ALTER` command can also be used to drop or remove columns. Following is the syntax,

```
ALTER TABLE table_name
DROP column_name;
```

Question:

Now , Drop the just added column in tbl_customer

Assignment:

`1-ALTER` Command: Modify an existing Column

`2-ALTER` Command: Rename a Column

Construct the physical implementation of given ER- Diagram