

**Project Name:**

**FOOD DELIVERY MANAGEMENT SYSTEM**

**Course Name: Introduction to Database**

**Course Teacher:**

**RIFAT TASNIM ANANNYA**

**Section: I**

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**PROJECT STORY**

Any Customers can order food in online. Every order has a **Unique Id**, **Time** and **type**.

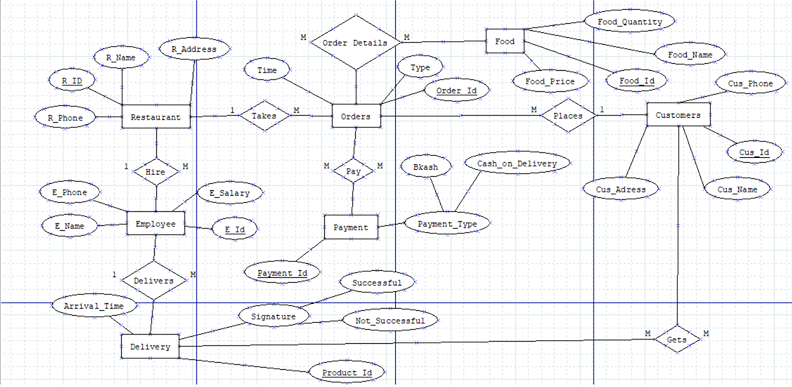
For order food customer need to input **Name**, **Phone Number** and **Address**.

Every customer has a unique **Customer Id**. Customer can select food with **Quantity** and customer can see **Food Name** and **Price**. Customer can select **Restaurant Name**. After submission, restaurant takes the order. Employee collect order from customer. Every employee has **Name**, **Phone Number**, **Salary** and **Unique Id**.

Employee take **Order** and **Deliver**. Delivery food has a **Unique Id** and **Arrival Time.**

Customer can pay bill by **Cash on Delivery** or **Bkash** and have a unique **Payment** **Id** and can select **Payment Type**.

**ER DIAGRAM**

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**NORMALIZATION**

Food-\*-Order Details-\*-Order

* **UNF:**

Order Details ( food\_id, food\_name, price, quantity, order\_id, type, time)

* **1NF:**

There is no multivalued attribute.

* **2NF:**

(order\_id, type, time, food\_id)

(food\_id, food\_name, price, quantity)

* **3NF:**

Type (type\_id, type \_name)

Orders (order\_id, time, type\_id, food\_id)

CUSTOMER-1-PLACES-\*-ORDERS

* **UNF:**

Places(cus\_id, cus\_name, phone, address, order\_id, time, type)

* **1NF:**

There is no multivalued attributes.

* **2NF:**

(order\_id, time, type, cus\_id)

(cus\_id, cus\_name, phone, address)

* **3NF:**

Type (type\_id, type \_name)

Contact (con\_id, phone, address)

Customer (cus\_id, cus\_name, con\_id)

Orders (order\_id, time, type\_id, cus\_id)

RESTAURANT-1-TAKE-\*ORDERS

* **UNF:**

Take(R\_id, R\_name, phone, address, order\_id, type, time)

* **1NF:**

There is no multivalued attribute.

* **2NF:**

(R\_id, R\_name, phone, address, order\_id)

(order\_id, type, time)

* **3NF:**

Type (type\_id, type \_name)

Rinfo (Rinfo\_id, R\_address, phone)

Order (order\_id, time, type\_id)

Restaurant (R\_id, R\_name, Rinfo\_id, order\_id)

RESTAURANT-1-HIRE-\*-EMPLOYEE

* **UNF:**

Hire (R\_id, R\_name, phone, address, emp\_id, name, phone, salary)

* **1NF:**

There is no multivalued attribute.

* **2NF:**

(R\_id, R\_name, phone, address, emp\_id)

(emp\_id, name, phone, salary)

* **3NF:**

Rinfo (Rinfo\_id, R\_address, phone)

Empinfo (empinfo\_id, phone, salary)

Employee (emp\_id, name, empinfo\_id)

Restaurant (R\_id, R\_name, Rinfo\_id, emp\_id)

ORDERS-\*-HAVE-\*-PAYMENT

* **UNF:**

Have (Order\_id, type, time, Payment\_id, payment type)

* **1NF:**

There is no multivalued attribute.

* **2NF:**

(Order\_id, type, time, Payment\_id)

(Payment\_id, payment\_type)

* **3NF:**

Type (type\_id, type \_name)

Payment (Payment\_id, payment\_type)

Orders (Order\_id, time, type\_id, payment\_id)

CUSTOMER-\*-GETS-\*-DELIVERY

* **UNF:**

Gets (cus\_id, cus\_name, phone, address, product\_id, arrival time, signature)

* **1NF:**

There is no multivalued attribute.

* **2NF:**

Customer (cus\_id, cus\_name, phone, address, product\_id)

Delivery ( product\_id, arrival time, signature)

* **3NF:**

Customer (cus\_id, cus\_name, con\_id)

Contact (con\_id, phone, address)

Delivery ( product\_id, arrival time, signature)

Customer (cus\_id, cus\_name, con\_id, product\_id)

EMPLOYEE-1-DELIVERS-\*-DELIVERY

* **UNF:**

Delivers (emp\_id, name, phone, salary, product\_id, arrival time, signature)

* **1NF:**

There is no multivalued attribute.

* **2NF :**

(emp\_id, name, phone, salary, product\_id)

(product\_id, arrival time, signature)

* **3NF:**

Empinfo (empinfo\_id, phone, salary)

Employee (emp\_id, name, empinfo\_id)

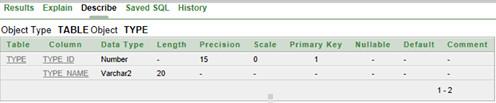
(product\_id, arrival time, signature)

Employee (emp\_id, name, empinfo\_id, product\_id)

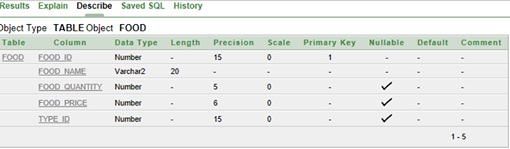
**TABLE CREATION**

1. **Type** (type\_id, type\_name)
2. **Food** (Food\_id, food\_name, food\_price, food\_quantity, type\_id)
3. **Contact** (con\_id, con\_phone, con\_address)
4. **Resinfo** (Res\_info\_id, Res\_info\_address, res\_info\_phone)
5. **Emp\_info** (Empinfo\_id, Emp\_info\_phone, Emp\_info\_sal)
6. **Payment** (Payment\_id, Payment\_type)
7. **Delivery** (Product\_id, arrival\_time, signature)
8. **Customer** (Cus\_id, cus\_name, con\_id, product\_id)
9. **Employee** (employee\_id, employee\_name, empinfo\_id, product\_id, Rinfo\_id)
10. **Order1** (order\_id, time, food\_id, type\_id, cus\_id, payment\_id)
11. **Restaurant** (R\_id, R\_name, Res\_info\_id, Employee\_id, order\_id)

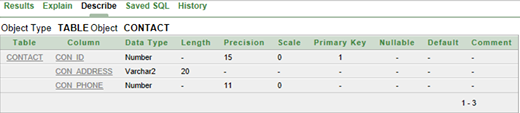
**1.CREATE TABLE TYPE (TYPE\_ID NUMBER (15) NOT NULL, TYPE\_NAME VARCHAR2(20) NOT NULL, PRIMARY KEY (TYPE\_ID));**



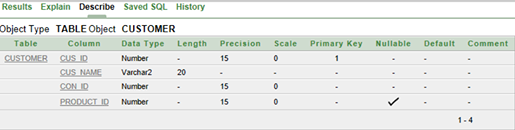
**2. CREATE TABLE FOOD (FOOD\_ID NUMBER(15) NOT NULL, FOOD\_NAME VARCHAR2(20) NOT NULL, FOOD\_PRICE NUMBER(6) NOT NULL, FOOD\_QUANTITY NUMBER(5), PRIMARY KEY(FOOD\_ID));**



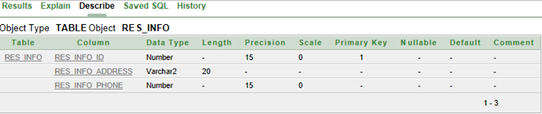
**3. CREATE TABLE CONTACT (CON\_ID NUMBER(15) NOT NULL, CON\_ADDRESS VARCHAR2(20) NOT NULL, CON\_PHONE NUMBER(11) NOT NULL, PRIMARY KEY (CON\_ID));**



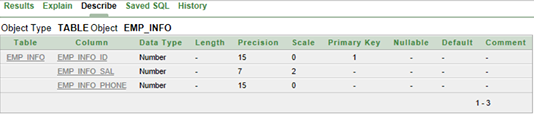
**4. CREATE TABLE CUSTOMER (CUS\_ID NUMBER(15) NOT NULL, CUS\_NAME VARCHAR2(20) NOT NULL, CON\_ID NUMBER(15) NOT NULL, PRIMARY KEY (CUS\_ID));**



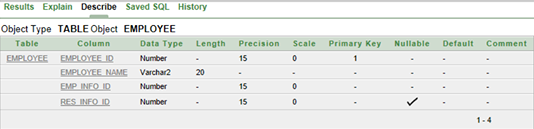
**5. CREATE TABLE RES\_INFO (RES\_INFO\_ID NUMBER(15) NOT NULL, RES\_INFO\_ADDRESS VARCHAR2(20) NOT NULL, RES\_INFO\_PHONE NUMBER(15) NOT NULL, PRIMARY KEY (RES\_INFO\_ID));**



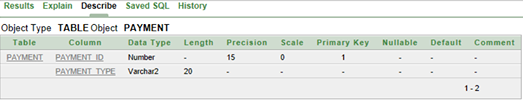
**6. CREATE TABLE EMP\_INFO (EMP\_INFO\_ID NUMBER(15) NOT NULL, EMP\_INFO\_SAL DECIMAL(7,2) NOT NULL, EMP\_INFO\_PHONE NUMBER(15) NOT NULL, PRIMARY KEY (EMP\_INFO\_ID));**



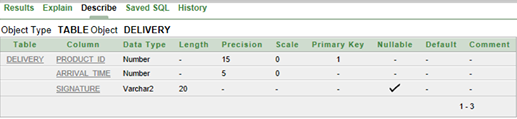
**7. CREATE TABLE EMPLOYEE (EMPLOYEE\_ID NUMBER(15) NOT NULL, EMPLOYEE\_NAME VARCHAR2(20) NOT NULL, EMP\_INFO\_ID NUMBER(15) NOT NULL, PRIMARY KEY (EMPLOYEE\_ID));**



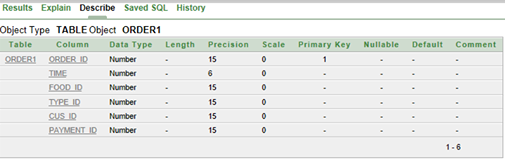
**8. CREATE TABLE PAYMENT (PAYMENT\_ID NUMBER(15) NOT NULL, PAYMENT\_TYPE VARCHAR2(20) NOT NULL, PRIMARY KEY (PAYMENT\_ID));**



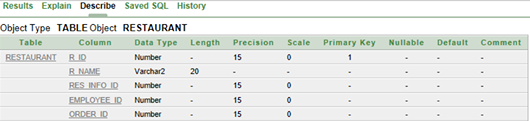
**9. CREATE TABLE DELIVERY (PRODUCT\_ID NUMBER(15) NOT NULL, ARRIVAL\_TIME NUMBER (5) NOT NULL, SIGNATURE VARCHAR2(20), PRIMARY KEY (PRODUCT\_ID));**



**10. CREATE TABLE ORDER1 (ORDER\_ID NUMBER(15) NOT NULL, TIME NUMBER(6) NOT NULL, FOOD\_ID NUMBER(15) NOT NULL, TYPE\_ID NUMBER(15) NOT NULL , CUS\_ID NUMBER(15) NOT NULL, PAYMENT\_ID NUMBER(15) NOT NULL, PRIMARY KEY(ORDER\_ID));**



**11. CREATE TABLE RESTAURANT (R\_ID NUMBER(15) NOT NULL, R\_NAME VARCHAR2(20) NOT NULL, RES\_INFO\_ID NUMBER(15) NOT NULL, EMPLOYEE\_ID NUMBER(15) NOT NULL, ORDER\_ID NUMBER(15) NOT NULL, PRIMARY KEY(R\_ID));**

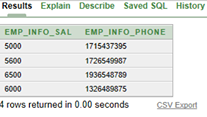


**SUB QUERY**

**Single Row subquery**

1. **Write a query to display the salary and phone number of employees where employees’ salaries are greater than employee id is 1222.**

* SELECT emp\_info\_sal, emp\_info\_phone FROM EMP\_INFO WHERE emp\_info\_sal> (SELECT emp\_info\_sal FROM emp\_info where emp\_info\_id=1222)



**2. Display the food and quantity of the food where food quantity is less than food id= 2055.**

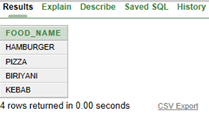
* SELECT Food\_name, Food\_quantity from food where Food\_quantity< (select Food\_quantity from food where food\_id=2055)



**Multiple Row Subquery**

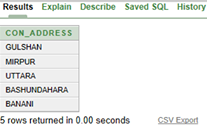
1. **Create a query that will display the food where price is greater than food\_id=’2011’, ’2022’, ’2033’, ’2044’, ’2055’.**

* SELECT food\_name FROM food WHERE food\_price > ANY (SELECT food\_price FROM food WHERE food\_id in (‘2011’, ’2022’, ’2033’, ’2044’, ’2055’)



1. **Create a query that will display contact address where contact phone number match contact id=’5555’, ’5556’, ’5666’, ’6666’.**

* SELECT con\_address FROM contact WHERE con\_phone in (SELECT con\_phone FROM contact WHERE con\_id in (5555, 5556, 5666, 6666)



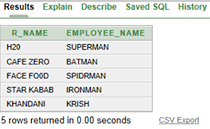
**JOINING**

**EQUI JOIN**

1. **Write a query to display the employee names from each restaurant.**

* SELECT R.R\_name, E.employee\_name FROM restaurant R,employee E

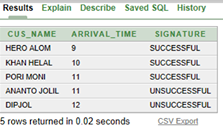
WHERE R.employee\_id=E.employee\_id



1. **Create a query that will display the customer name, arrival time and signature.**

* SELECT C.cus\_name, D.arrival\_time, D.signature FROM customer C, delivery D

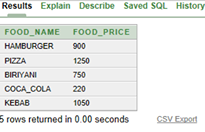
WHERE C.product\_id=D.product\_id



**SELF JOIN**

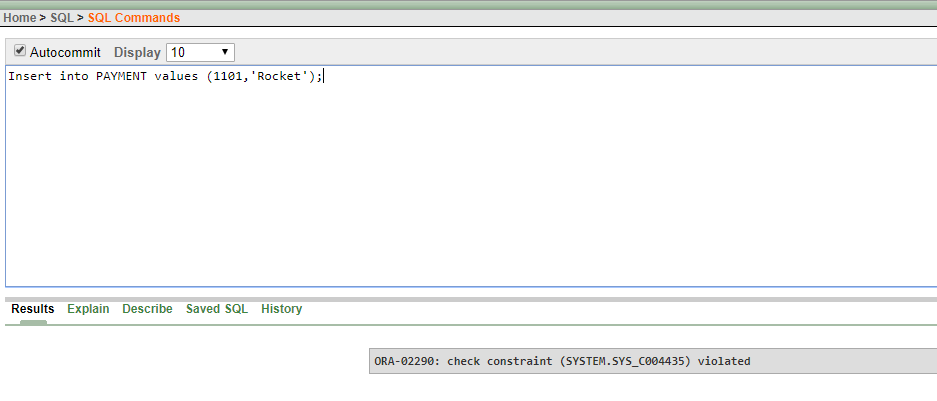
1. **Create a query that will display food name, food price according to same table.**

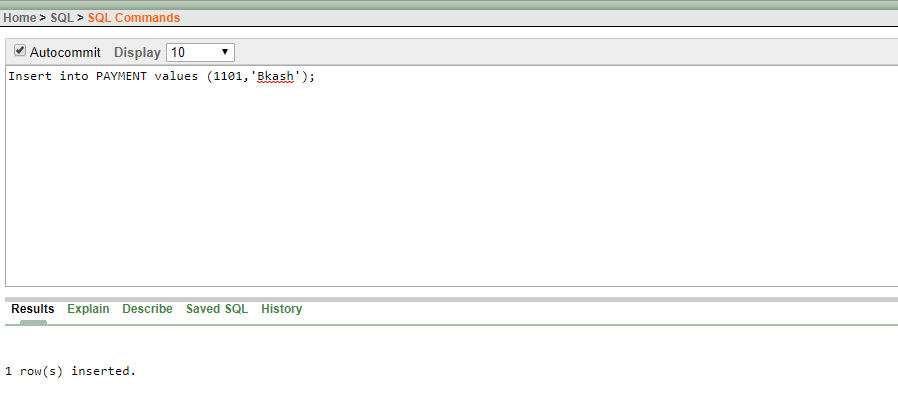
* SELECT f.food\_name, k.food\_price FROM food f ,food k WHERE f.food\_id=k.food\_id



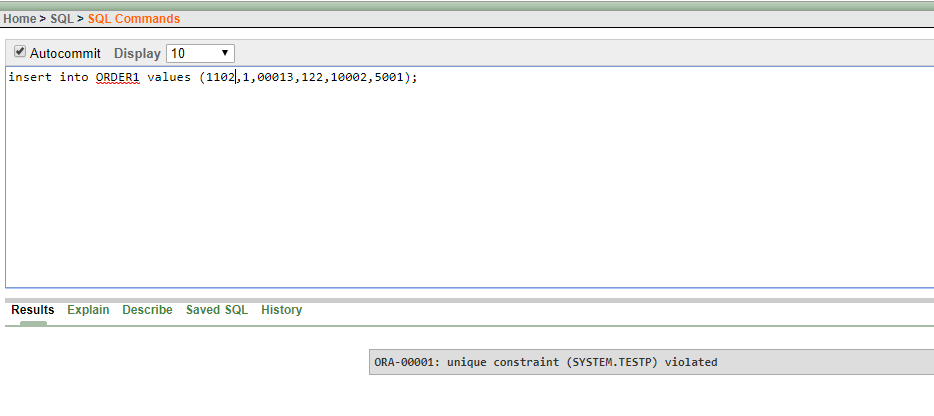
**CONSTRAINTS**

* **Check Constraint:**

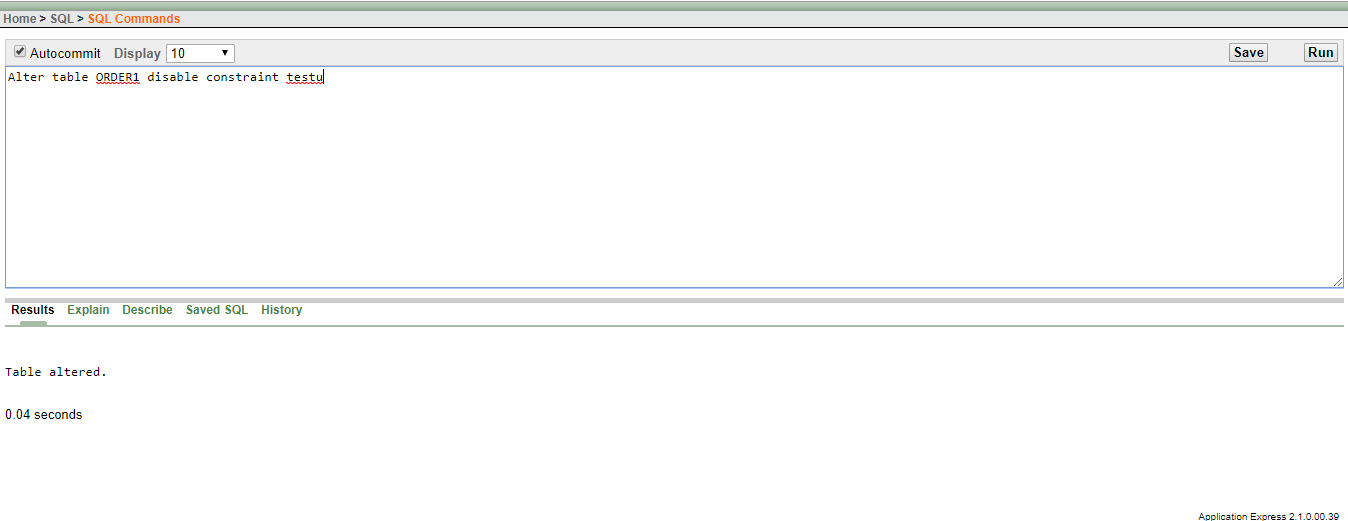




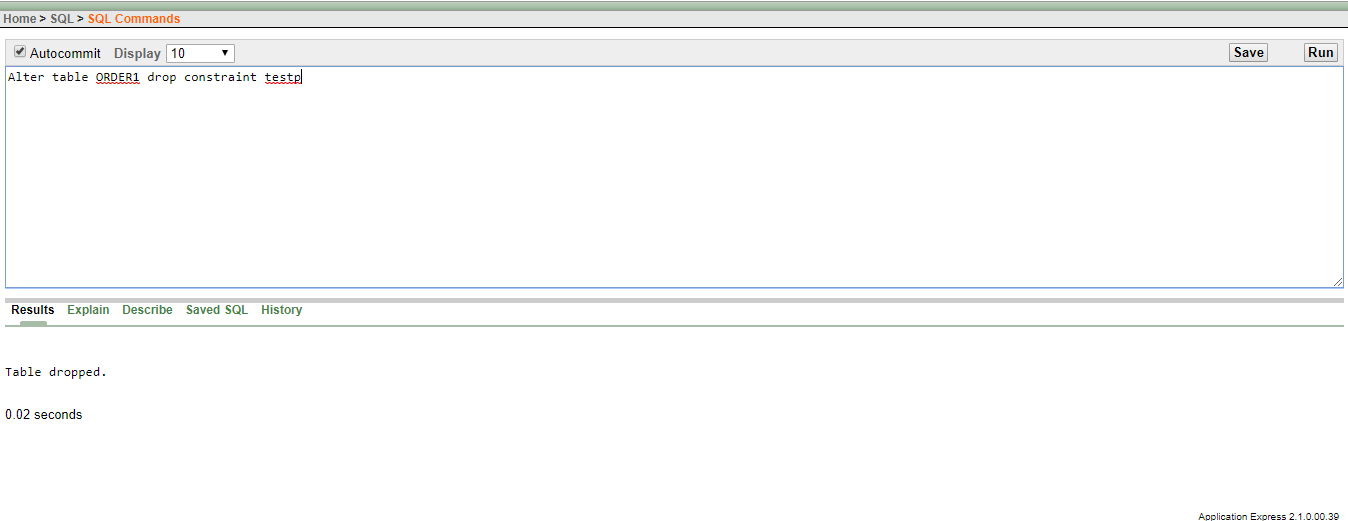
* **Primary key and Unique constraint:**



* **Disable constraint:**



* **Drop constraint:**



* **NULL constraint:**

