AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH

WHERE LEADERS ARE CREATED

SUPERSTORE MANAGEMENT SYSTEM

Submitted to:

JUENA AHMED NOSHIN

Course Name: **INTRODUCTION TO DATABASE**

Section: **E**

Group Members:

Name	ID	Contribution
Sudipta Saha	20-43587-1	Introduction, Normalization, Relational Algebra
Shohorab Hossain Shawon	20-42498-1	ER, Schema, Conclusion
Sakib Ahmed	20-42538-1	Table Creation, Scenario Description
Maisha Mahjabin Omy	20-43537-1	Data Insertion, Query Writing
Muntakim Mustafa	19-41616-3	

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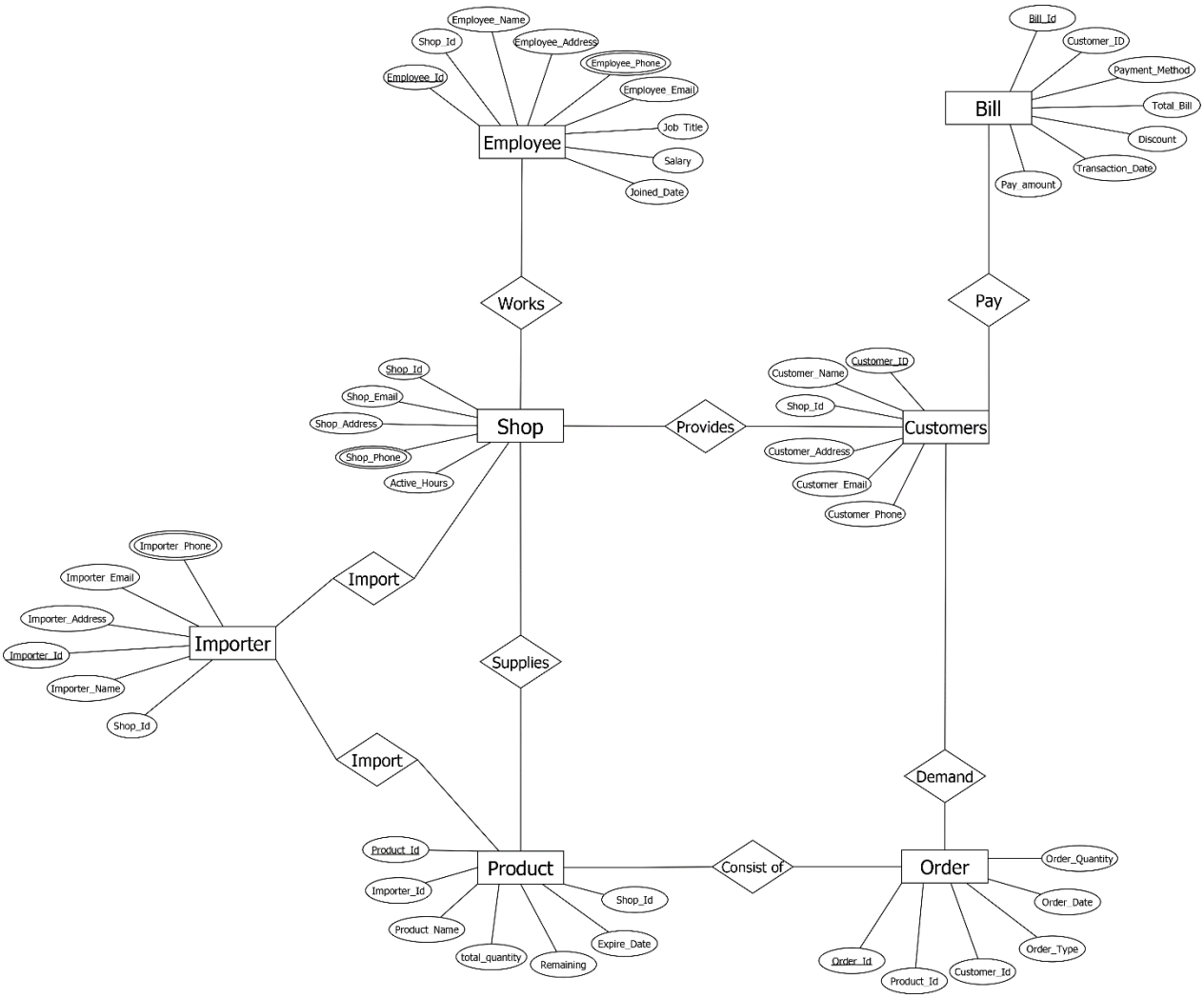
INTRODUCTION:

A database management system (DBMS) is a system software for creating and managing databases. The DBMS provides users and programmers with a systematic way to create, retrieve, update and manage data. A DBMS makes it possible for end users to create, read, update and delete data in a database. In our project (superstore Management System) was created by the concept of DBMS. This project deals with Superstore Auto motion. A Superstore is a self- service store offering a wide variety of items related to food, household or daily use. Includes both purchase and sale of products. We Designed to make the existing system more informative, reliable, fast and easy for all the stake-holders. Here we have some quick queries what made the table and insert data to tables, and show data from tables.

SCENARIO DESCRIPTION:

In a Superstore management, A shop is identified by Shop_Id, Address, Phone, Email,Active_Hours. A shop works multiple employees. But an employee can work on exactly one shop. An employee is identified by Employee_Id, Empoyee_Name, Empoyee_Address, Job_Title, Joined_Date, Phone, email, Salary. A shop Demand many customers. One customer can visit one shop at a time. Customer is identified by Customer_Id, Customer_Name, Customer_Address, Phone, Email. A customer can get service from many employees and an employee can give services to many customers at a time. A shop can import from many importers. And one importer can supply to many shops. An importer is identified by Importer_Id, Importer_name, Importer_Addresss, Email, Importer_Phone. A shop supplies various products to sell. A product is identified by Product_Id, Product_name, total_quantity,Expire_Date, Remaining. A customer can have many orders and an order can be consist of many customers. Orders are identified by Order_Id, Order_Type, Quantity, Order_Date. An order can contain many products and a product can be contained in many orders. Bills are identified by Bill_Id, Total_Bill, Payment_Method, Transaction_Date, Discount. A customer can pay one bill at a time and a bill can be for one customer.

ER-DIAGRAM:


Employee_Name
Shop_Id
Employee_Address
Employee_Phone
Employee_Id
Employee_Email
Job_Title
Salary
Joined_Date
Employee
Bill_Id
Customer_ID
Payment_Method
Bill
Total_Bill
Discount
Transaction_Date
Pay_amount
Works
Pay
Shop_Id
Shop_Email
Shop_Address
Shop
Shop_Phone
Active_Hours
Provides
Customer_Name
Customer_ID
Shop_Id
Customers
Customer_Address
Customer_Email
Customer_Phone
Importer_Phone
Importer_Email
Import
Importer_Address
Importer
Importer_Id
Importer_Name
Shop_Id
Supplies
Import
Demand
Product_Id
Product
Consist of
Order
Order_Quantity
Importer_Id
Shop_Id
Order_Date
Product_Name
Expire_Date
Order_Type
total_quantity
Remaining
Order_Id
Product_Id
Customer_Id

NORMALIZATION

UNF:
Works (Shop_id, shop_address, shop_email, shop_phone, active_hours, job_title, salary, Employee_mail, Employee_id, Employee_phone, Employee_adress, Employee_name, joined_date,shop_Id)

1NF:
Shop_phone & employee_phone is multivalued attribute

1. Shop_id, shop_address, shop_email, shop_phone, active_hours, job_title, salary, Employee_mail, Employee_id, Employee_phone, Employee_adress, Employee_name, joined_date,shop_Id

2NF:

1. Shop_id, shop_address, shop_email, shop_phone, active_hours

2. Employee_id, Shop_id, job_title, salary, Employee_mail, Employee_phone, Employee_adress, Employee_name,joined_date

3NF:

There is no transitive dependency

1. Shop_id, shop_address, shop_email, shop_phone, active_hours

2. Employee_id, Shop_id, job_title, salary, Employee_mail, Employee_phone, Employee_adress, Employee_name,joined_date

Table Creation:

1. Shop_id, shop_address, shop_email, shop_phone, active_hours

2. Employee_id, Shop_id, job_title, salary, Employee_email, Employee_phone, Employee_adress, Employee_name,joined_date

3. **Shop_Id, Employee_Id**

UNF:
Provides (Shop_id, Shop_email, Shop_address, Shop_phone, active_hours, Customer_id, customer_name,Shop_Id, customer_address, customer_email, customer_phone)

1NF:
Shop_phone is multivalued attribute

1. Shop_id, shop_email, shop_address, shop_phone, active_hours, customer_id, customer_name,Shop_Id, customer_address, customer_email, customer_phone

2NF:

1. Shop_id, shop_email, shop_address, shop_phone, active_hours

2. customer_id, customer_name,Shop_Id, customer_address, customer_email, customer_phone

3NF:
There is no transitive dependency

1. Shop_id, shop_email, shop_address, shop_phone, active_hours

2. customer_id, customer_name,Shop_Id, customer_address, customer_email, customer_phone

Table Creation:

1. Shop_id, shop_address, shop_email, shop_phone, active_hours

2. customer_id, customer_name,Shop_Id, customer_address, customer_email, customer_phone, Shop_id

3. **Shop_Id, Customer_Id**

UNF:
Import (Shop_id, shop_email, shop_address, shop_phone, active_hours, importer_phone, importer_email, importer_address ,Importer_id, importer_name, Shop_Id)

1NF:
shop_phone & importer_phone are multivalued attributes

1. Shop_id, shop_email, shop_address, shop_phone, active_hours, importer_phone, importer_email, importer_address ,Importer_id, importer_name, Shop_Id

2NF:

1. Shop_id, shop_email, shop_address, shop_phone, active_hours
2. importer_phone, importer_email, importer_address ,Importer_id, importer_name, Shop_Id

3NF:

There is no transitive dependency

1. Shop_id, shop_email, shop_address, shop_phone, active_hours

2. importer_phone, importer_email, importer_address ,Importer_id, importer_name, Shop_Id

Table Creation:

1. Shop_id, shop_email, shop_address, shop_phone, active_hours

2. importer_phone, importer_email, importer_address ,Importer_id, importer_name, Shop_Id

3. **Shop_id** , **Importer_id**

UNF:

Supplies (Shop_id, Shop_email, Shop_address, Shop_phone, Active_hours, Product_id,Importer_Id, Product_name, Total_quantity, Remaining, Expire_date,Shop_Id)

1NF:

shop_phone is a multivalued attribute

1. Shop_id, Shop_email, Shop_address, Shop_phone, Active_hours, Product_id,Importer_Id, Product_name, Total_quantity, Remaining, Expire_date,Shop_Id

2NF:

1. Shop_id, Shop_email, Shop_address, Shop_phone, Active_hours

2. Product_id,Importer_Id, Product_name, Total_quantity, Remaining, Expire_date,Shop_Id

3NF:

There is no transitive dependency

1. Shop_id, Shop_email, Shop_address, Shop_phone, Active_hours

2. Product_id,Importer_Id, Product_name, Total_quantity, Remaining, Expire_date,Shop_Id

Table Creation:

1. Shop_id, Shop_email, Shop_address, Shop_phone, Active_hours

2. Product_id,Importer_Id, Product_name, Total_quantity, Remaining, Expire_date,Shop_Id

UNF:

Consist of (Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity, Product_Id, Importer_Id, product_name, total_quantity, Remaining, Expire_date, Shop_Id)

1NF:

There is no multivalued attribute

1. Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity, Product_Id, Importer_Id, product_name, total_quantity, Remaining, Expire_date, Shop_Id

2NF:

1. Order_id, Product_id, Customer_Id, order_type, order_Date,Order_Quantity

2. Product_Id, Importer_Id, product_name, total_quantity, Remaining, Expire_date, Shop_Id

3NF:

There is no transitive dependency

1. Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity

2. Product_Id, Importer_Id, product_name, total_quantity, Remaining, Expire_date, Shop_Id

Table Creation:

1. Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity

2. Product_Id, Importer_Id, product_name, total_quantity, Remaining, Expire_date, Shop_Id

3. **Order_Id**, **Product_Id**

UNF:

Demand (Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity, Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone)

1NF:

There is no multivalued attribute

1. Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity, Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone

2NF:

1. Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity

2. Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone

3NF:

There is no transitive dependency

1. Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity

2. Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone.

Table Creation:

1. Order_id, Product_id, Customer_Id, order_type, order_Date, Order_Quantity

2. Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone.

3. **Order_Id , Customer_Id**

UNF:

Pay (Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone, Bill_Id, Customer_Id, Payment_Method,Total_Bill, Discount, Transaction_Date,Pay_Amount)

1NF:

There is no multivalued attribute

1. Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone, Bill_Id, Customer_Id, Payment_Method,Total_Bill, Discount, Transaction_Date,Pay_Amount

2NF:

1. Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone

2. Bill_Id, Customer_Id, Payment_Method,Total_Bill, Discount, Transaction_Date,Pay_Amount

3NF:

1. Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone

2. Bill_Id, Customer_Id, Payment_Method, Discount, Transaction_Date

3. Total_Bill, Pay_Amount

Table Creation:

1. Customer_Id, Customer_Name,Shop_Id, Customer_Address, Customer_Email, Customer_Phone

2. Bill_Id, Customer_Id, Payment_Method, Discount, Transaction_Date, **A_Id**

3. Total_Bill, Pay_Amount , A_Id

4. **Customer_Id , Bill_Id**

UNF:
Import (Importer_phone, Importer_email, Importer_address ,Importer_id, importer_name, Shop_Id, Product_Id, Importer_Id, Product_Name, total_Quantity, Remaining, Expire_Date, Shop_Id)

1NF:
Product_Id & importer_phone are multivalued attributes

1. Importer_phone, Importer_email, Importer_address ,Importer_id, importer_name, Shop_Id, Product_Id, Importer_Id, Product_Name, total_Quantity, Remaining, Expire_Date, Shop_Id

2NF:

1. Importer_phone, Importer_email, Importer_address ,Importer_id, importer_name, Shop_Id

2. Product_Id, Importer_Id, Product_Name, total_Quantity, Remaining, Expire_Date, Shop_Id

3NF:
There is no transitive dependency

1. Importer_phone, Importer_email, Importer_address ,Importer_id, importer_name, Shop_Id

2. Product_Id, Importer_Id, Product_Name, total_Quantity, Remaining, Expire_Date, Shop_Id

Table Creation:

1. Importer_phone, Importer_email, Importer_address ,Importer_id, importer_name, Shop_Id

2. Product_Id, Importer_Id, Product_Name, total_Quantity, Remaining, Expire_Date, Shop_Id

3. **Importer_id , Product_Id**

SCHEMA DIAGRAM

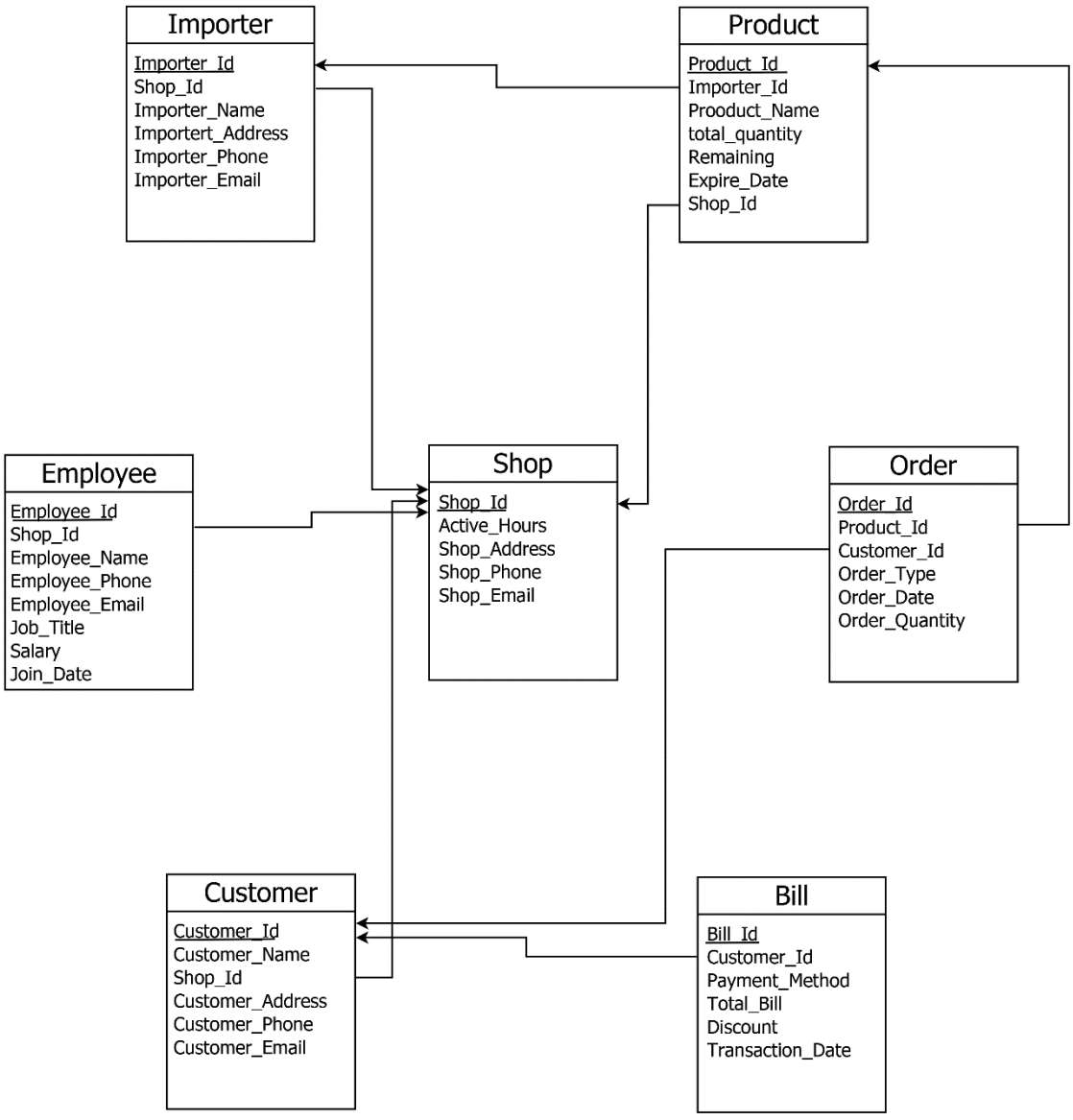


TABLE CREATION:

SHOP:
CREATE TABLE shop(shop_id number(10) primary key, active_hours varchar2(20), shop_address varchar2(50), shop_phone number(11), shop_email varchar2(30),product_id number(10),importer_id number(10));

Object Type **TABLE** Object **SHOP**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SHOP	SHOP_ID	Number	-	10	0	1	-	-	-
	ACTIVE_HOURS	Varchar2	20	-	-	-	✓	-	-
	SHOP_ADDRESS	Varchar2	50	-	-	-	✓	-	-
	SHOP_PHONE	Number	-	11	0	-	✓	-	-
	SHOP_EMAIL	Varchar2	30	-	-	-	✓	-	-
	PRODUCT_ID	Number	-	10	0	-	✓	-	-
	IMPORTER_ID	Number	-	10	0	-	✓	-	-
									1 - 7

EMPLOYEE:
CREATE TABLE employee (employee_id number(10) primary key,shop_id number(10), foreign key(shop_id) references shop(shop_id),employee_name varchar2(20),employee_address varchar2(20),employee_phone number(10),employee_email varchar2(30),job_title varchar2(20),salary number(10),join_date date);

Object Type **TABLE** Object **EMPLOYEE**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEE	EMPLOYEE_ID	Number	-	10	0	1	-	-	-
	SHOP_ID	Number	-	10	0	-	✓	-	-
	EMPLOYEE_NAME	Varchar2	20	-	-	-	✓	-	-
	EMPLOYEE_ADDRESS	Varchar2	20	-	-	-	✓	-	-
	EMPLOYEE_PHONE	Number	-	10	0	-	✓	-	-
	EMPLOYEE_EMAIL	Varchar2	30	-	-	-	✓	-	-
	JOB_TITLE	Varchar2	20	-	-	-	✓	-	-
	SALARY	Number	-	10	0	-	✓	-	-
	JOIN_DATE	Date	7	-	-	-	✓	-	-
									1 - 9

CUSTOMER:

CREATE TABLE customer(customer_id number(10) primary key,customer_name varchar2(20),shop_id number(10),foreign key(shop_id) references shop(shop_id),customer_address varchar2(20),customer_email varchar2(30),customer_phone number(11));

Object Type **TABLE** Object **CUSTOMER**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CUSTOMER	CUSTOMER_ID	Number	-	10	0	1	-	-	-
	CUSTOMER_NAME	Varchar2	20	-	-	-	✓	-	-
	SHOP_ID	Number	-	10	0	-	✓	-	-
	CUSTOMER_ADDRESS	Varchar2	20	-	-	-	✓	-	-
	CUSTOMER_EMAIL	Varchar2	30	-	-	-	✓	-	-
	CUSTOMER_PHONE	Number	-	11	0	-	✓	-	-

1 - 6

IMPORTER:

create table importer(importer_id number(10) primary key,shop_id number(10),foreign key(shop_id) references shop (shop_id),importer_name varchar2(20),importer_address varchar2(20),importer_phone number(11),importer_email varchar2(30));

Object Type **TABLE** Object **IMPORTER**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
IMPORTER	IMPORTER_ID	Number	-	10	0	1	-	-	-
	SHOP_ID	Number	-	10	0	-	✓	-	-
	IMPORTER_NAME	Varchar2	20	-	-	-	✓	-	-
	IMPORTER_ADDRESS	Varchar2	20	-	-	-	✓	-	-
	IMPORTER_PHONE	Number	-	11	0	-	✓	-	-
	IMPORTER_EMAIL	Varchar2	30	-	-	-	✓	-	-

1 - 6

PRODUCT:

create table product(product_id number(10) primary key,importer_id number(10),foreign key(importer_id) references importer(importer_id),product_name varchar2(20),total_quantity number(10),remaining number(10),expire_date date,shop_id number(10),foreign key(shop_id) references shop(shop_id));

Object Type **TABLE** Object **PRODUCT**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PRODUCT	PRODUCT_ID	Number	-	10	0	1	-	-	-
	IMPORTER_ID	Number	-	10	0	-	✓	-	-
	PRODUCT_NAME	Varchar2	20	-	-	-	✓	-	-
	TOTAL_QUANTITY	Number	-	10	0	-	✓	-	-
	REMAINING	Number	-	10	0	-	✓	-	-
	EXPIRE_DATE	Date	7	-	-	-	✓	-	-
	SHOP_ID	Number	-	10	0	-	✓	-	-

1 - 7

ORDER:

create table orde_r(order_id number(10) primary key,product_id number(10),foreign key(product_id) references product (product_id),customer_id number(10),foreign key(customer_id) references customer(customer_id),order_type varchar2(20),order_date date,order_quantity number(10));

Object Type **TABLE** Object **ORDE_R**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ORDE_R	ORDER_ID	Number	-	10	0	1	-	-	-
	PRODUCT_ID	Number	-	10	0	-	✓	-	-
	CUSTOMER_ID	Number	-	10	0	-	✓	-	-
	ORDER_TYPE	Varchar2	20	-	-	-	✓	-	-
	ORDER_DATE	Date	7	-	-	-	✓	-	-
	ORDER_QUANTITY	Number	-	10	0	-	✓	-	-

1 - 6

BILL:

create table bill(bill_id number(10) primary key,customer_id number(10),foreign key(customer_id) references customer(customer_id),payment_method varchar2(20),total_bill number(10),discount varchar2(10),transaction_date date,pay_amount number(10));

Object Type **TABLE** Object **BILL**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BILL	BILL_ID	Number	-	10	0	1	-	-	-
	CUSTOMER_ID	Number	-	10	0	-	✓	-	-
	PAYMENT_METHOD	Varchar2	20	-	-	-	✓	-	-
	TOTAL_BILL	Number	-	10	0	-	✓	-	-
	DISCOUNT	Varchar2	10	-	-	-	✓	-	-
	TRANSACTION_DATE	Date	7	-	-	-	✓	-	-
	PAY_AMOUNT	Number	-	10	0	-	✓	-	-

1 - 7

Sequence:

- CREATE SEQUENCE ordersequence start with 1 increment by 1 maxvalue 500 nocycle;

USER CREATION & Assign Role:

- CREATE user store IDENTIFIED by super;
- CREATE role manager;
- GRANT create table, create view, create sequence to manager;
- GRANT connect, resource, unlimited tablespace to store;

- GRANT manager to store;
- ALTER USER store DEFAULT TABLESPACE USERS;
- ALTER USER store TEMPORARY TABLESPACE TEMP;

DATA INSERTATION:

SHOP:

```
 insert into shop values(101,'7 am- 7pm','Dhaka-Chittagong
Highway',152356656,'abc1@gmail.com',1,1);
 insert into shop values(1,'7 am-1am','Dhaka-chittagong
Highway',152356656,'abc2@gmail.com',1,1);
insert into shop values(2,'7 am-1am','Mirpur2',17887882,'rupa@gmail.com',201,101);
insert into shop values(3,'7 am-9pm','Dhaka-Sylhet Highway',152996684,'abc3@gmail.com',3,3);
 insert into shop values(4,'7 am-10pm','Dhaka-comilla
Highway',15245678,'abc4@gmail.com',4,4);
insert into shop values(105,'7 am-11pm','Dhaka-Dinajpur
Highway',15234587,'abc5@gmail.com',5,5);
```

```
Select*from shop;
```

Results | Explain | Describe | Saved SQL | History

SHOP_ID	ACTIVE_HOURS	SHOP_ADDRESS	SHOP_PHONE	SHOP_EMAIL	PRODUCT_ID	IMPORTER_ID
101	7 am- 7pm	Dhaka-Chittagong Highway	152356656	abc1@gmail.com	1	1
1	7 am - 1 am	Dhaka-Chittagong Highway	152356656	abc1@gmail.com	1	1
2	7 am- 1 am	mirpur2	17887882	rupa@gmail.com	201	101
3	7 am- 9pm	Dhaka-sylhet Highway	152996684	abc3@gmail.com	3	3
4	7 am-10pm	Dhaka-comilla Highway	15245678	abc4@gmail.com	4	4
105	7 am-11pm	Dhaka-Dinajpur Highway	15234587	abc5@gmail.com	5	5

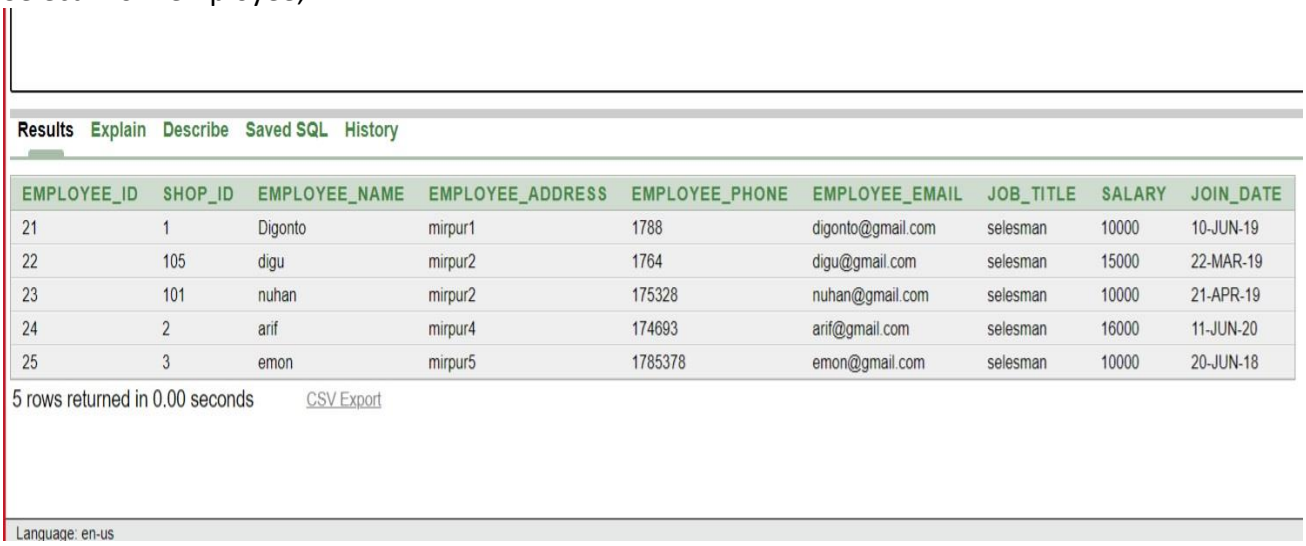
6 rows returned in 0.01 seconds CSV Export

EMPLOYEE:

```
INSERT INTO employee
values(21,1,'Digonto','mirpur1',1788,'digonto@gmail.com','selesman',10000,to_date('10 jun
2019','fmdd month yyyy'));
INSERT INTO employee
values(22,105,'digu','mirpur2',1764,'digu@gmail.com','selesman',15000,to_date('22 mar
2019','fmdd month yyyy'));
```

INSERT INTO employee
values(23,101,'nuhan','mirpur2',175328,'nuhan@gmail.com','selesman',10000,to_date('21 Apr 2019','fmdd month yyyy'));
INSERT INTO employee
values(24,2,'arif','mirpur4',174693,'arif@gmail.com','selesman',16000,to_date('11 jun 2020','fmdd month yyyy'));
INSERT INTO employee
values(25,3,'emon','mirpur5',1785378,'emon@gmail.com','selesman',10000,to_date('20 jun 2018','fmdd month yyyy'));

Select*from employee;



Results Explain Describe Saved SQL History

EMPLOYEE_ID	SHOP_ID	EMPLOYEE_NAME	EMPLOYEE_ADDRESS	EMPLOYEE_PHONE	EMPLOYEE_EMAIL	JOB_TITLE	SALARY	JOIN_DATE
21	1	Digonto	mirpur1	1788	digonto@gmail.com	selesman	10000	10-JUN-19
22	105	digu	mirpur2	1764	digu@gmail.com	selesman	15000	22-MAR-19
23	101	nuhan	mirpur2	175328	nuhan@gmail.com	selesman	10000	21-APR-19
24	2	arif	mirpur4	174693	arif@gmail.com	selesman	16000	11-JUN-20
25	3	emon	mirpur5	1785378	emon@gmail.com	selesman	10000	20-JUN-18

5 rows returned in 0.00 seconds CSV Export

Language: en-us

CUSTOMER:

INSERT INTO customer values(51,'saif',1,'khulna','saif@gmail.com',17654);
INSERT INTO customer values(52,'kabbo',105,'Dhaka','kabbo@gmail.com',1764112221); INSERT INTO customer values(53,'ridu',101,'Dhaka','ridu@gmail.com',1762574581);
INSERT INTO customer values(56,'ridu',101,'Dhaka','ridu@gmail.com',1762574581);
INSERT INTO customer values(54,'tasrif',2,'Dhaka','tasrif@gmail.com',1765444635); INSERT INTO customer values(55,'tanbir',3,'Dhaka','tanbir@gmail.com',1765437822);
INSERT INTO customer values(55,'tanbir',3,'Dhaka','tanbir@gmail.com',1765437822);

Select*from customer;

Results Explain Describe Saved SQL History

CUSTOMER_ID	CUSTOMER_NAME	SHOP_ID	CUSTOMER_ADDRESS	CUSTOMER_EMAIL	CUSTOMER_PHONE
51	saif	1	khulna	saif@gmail.com	17654
52	kabbo	105	Dhaka	kabbo@gmail.com	1764112221
53	ridu	101	Dhaka	ridu@gmail.com	1762574581
56	ridu	101	Dhaka	ridu@gmail.com	1762574581
54	tasrif	2	Dhaka	tasrif@gmail.com	1765444635
55	tanbir	3	Dhaka	tanbir@gmail.com	1765437822
50	tanbir	3	Dhaka	tanbir@gmail.com	1765437822

7 rows returned in 0.00 seconds CSV Export

IMPORTER:

INSERT INTO importer values(101,1,'alamin','bhola',17887,'mridoy031@gmail.com'); INSERT INTO importer values(102,105,'korim','Dhaka',19437,'korim@gmail.com'); INSERT INTO importer Values(103,4,'hasan','bhola',16887,'hasan@gmail.com');
INSERT INTO importer Values(104,2,'rimon','barisal',16887,'rimon@gmail.com');
INSERT INTO importer Values(106,2,'rimon','Barisal',159887,'rimon@gmail.com');
INSERT INTO importer Values(110,2,'rimon','Barisal',159887,'rimon@gmail.com')
INSERT INTO importer values(105,3,'suhvo','mirpur',17887,'suhvo@gmail.com');
Select*from importer;

Results Explain Describe Saved SQL History

IMPORTER_ID	SHOP_ID	IMPORTER_NAME	IMPORTER_ADDRESS	IMPORTER_PHONE	IMPORTER_EMAIL
101	1	alamin	bhola	17887	mridoy031@gmail.com
102	105	korim	Dhaka	19437	korim@gmail.com
103	4	hasan	bhola	16887	hasan@gmail.com
104	2	rimon	Barisal	159887	rimon@gmail.com
106	2	rimon	Barisal	159887	rimon@gmail.com
110	2	rimon	Barisal	159887	rimon@gmail.com
105	3	suhvo	mirpur	17887	suhvo@gmail.com

7 rows returned in 0.02 seconds CSV Export

PRODUCT:

INSERT INTO product values(201,101,'jilapi',31,30,to_date('21 Jan 2031','fmdd month yyyy') , 1);
INSERT INTO product values(202,102,'Apple ',34,30,to_date('21 Feb 2031','fmdd month yyyy') , 2);
INSERT INTO product values(203,103,'bilberry',31,30,to_date('21 March 2031','fmdd month yyyy') , 3);
INSERT INTO product values(204,104,'banana',21,30,to_date('25 Jun 2031','fmdd month yyyy') , 4);
INSERT INTO product values(205,105,'apricot',43,40,to_date('11 Jan 2031','fmdd month

yyyy') , 105);

select*from product ;

Results Explain Describe Saved SQL History

PRODUCT_ID	IMPORTER_ID	PRODUCT_NAME	TOTAL_QUANTITY	REMAINING	EXPIRE_DATE	SHOP_ID
201	101	jilapi	31	30	21-JAN-31	1
202	102	Apple	34	30	21-FEB-31	2
203	103	bilberry	31	30	21-MAR-31	3
204	104	banana	21	30	25-JUN-31	4
205	105	apricot	43	40	11-JAN-31	105

5 rows returned in 0.00 seconds CSV Export

ORDER:

insert into orde_r values(ordersequence.nextval,201,51,'On Demand',to_date('12 Nov 2019','fmdd month yyyy'),1);
insert into orde_r values(ordersequence.nextval,202,52,'On Demand',to_date('12 Nov 2019','fmdd month yyyy'),1);
insert into orde_r values(ordersequence.nextval,203,53,'On Demand',to_date('12 Nov 2019','fmdd month yyyy'),1);
insert into orde_r values(ordersequence.nextval,204,54,'On Demand',to_date('12 Nov 2019','fmdd month yyyy'),1);
insert into orde_r values(ordersequence.nextval,205,55,'On Demand',to_date('12 Nov 2019','fmdd month yyyy'),1);

Select*from orde_r;

Results Explain Describe Saved SQL History

ORDER_ID	PRODUCT_ID	CUSTOMER_ID	ORDER_TYPE	ORDER_DATE	ORDER_QUANTITY
7	201	51	On Demand	12-NOV-19	1
8	202	52	On Demand	12-NOV-19	1
9	203	53	On Demand	12-NOV-19	1
10	204	54	On Demand	12-NOV-19	1
11	205	55	On Demand	12-NOV-19	1

5 rows returned in 0.00 seconds CSV Export

BILL:
INSERT INTO bill values(401,51,'visa_card',1500,'4%',to_date('12 Jan 2021','fmdd month yyyy'),900);
INSERT INTO bill Values(402,52,'ATM_card',2000,'4%',to_date('14 Feb 2021','fmdd month yyyy'),1200);
INSERT INTO bill Values(403,53,'visa_card',1500,'4%',to_date('14 Feb 2021','fmdd month yyyy'),900);

```
INSERT INTO bill Values(404,54,'bikas',1800,'4%',to_date('15 Mar 2020','fmdd month
yyyy'),1080);
INSERT INTO bill Values(405,55,'online',1500,'4%',to_date('16 Nov 2020','fmdd month
yyyy'),900);

select*from bill;
```

Results Explain Describe Saved SQL History

BILL_ID	CUSTOMER_ID	PAYMENT_METHOD	TOTAL_BILL	DISCOUNT	TRANSACTION_DATE	PAY_AMOUNT
401	51	visa_card	1500	4%	12-JAN-21	900
402	52	ATM_card	2000	4%	14-FEB-21	1200
403	53	visa_card	1500	4%	14-FEB-21	900
404	54	bikas	1800	4%	15-MAR-20	1080
405	55	online	1500	4%	16-NOV-20	900

5 rows returned in 0.00 seconds CSV Export

QUERY WRITING:

SUBQUERY:

SINGEL ROW SUB QUEREY:

Question: 01

Write a query to find product id, importer id, shop id from product table where remaining is not equal to 40. (single-row subquery)

Answer: select product_id, importer_id, shop_id from product where remaining <> (select remaining from product where remaining=40);

Results Explain Describe Saved SQL History

PRODUCT_ID	IMPORTER_ID	SHOP_ID
201	101	1
202	102	2
203	103	3
204	104	4

4 rows returned in 0.00 seconds CSV Export

MULTIPLE ROW SUB QUERY:

Question:02

Write a query to find importer name from importer table where importer address is - "Barisal".Display the query using the following format- "Importer name is importer name" and importer name must be follow "_i%" strings characteristic format.(multiple-row subquery)

Answer: select concat('Importer name is ', importer_name) as concat_string, length(concat('Importer name is ', importer_name)) as string_length from importer where importer_address= all(select importer_address from importer where importer_address='Barisal') and importer_name like '_i%';

Results Explain Describe Saved SQL History

CONCAT_STRING	STRING_LENGTH
Importer name is rimon	22
Importer name is rimon	22
Importer name is rimon	22

3 rows returned in 0.00 seconds CSV Export

JOINING:

Question: 01

Write a query to find product id, product name, total quantity, remaining, expire date, importer name, importer id, importer address and importer phone from product and importer table.

Answer: SELECT product.product_id,product.product_name,product.total_quantity,product.remaining,product.expire_date,importer.importer_name,importer.importer_id,importer.importer_address,importer.importer_phone FROM product,importer WHERE product.importer_id=importer.importer_id;

Results Explain Describe Saved SQL History

PRODUCT_ID	PRODUCT_NAME	TOTAL_QUANTITY	REMAINING	EXPIRE_DATE	IMPORTER_NAME	IMPORTER_ID	IMPORTER_ADDRESS	IMPORTER_PHONE
201	jilapi	31	30	21-JAN-31	alamin	101	bhola	17887
202	Apple	34	30	21-FEB-31	korim	102	Dhaka	19437
203	bilberry	31	30	21-MAR-31	hasan	103	bhola	16887
204	banana	21	30	25-JUN-31	rimon	104	Barisal	159887
205	apricot	43	40	11-JAN-31	suhvo	105	mirpur	17887

5 rows returned in 0.00 seconds CSV Export

Question: 02

Write a query to find employee id, employee name, job title, shop id, shop address from employee and shop table.

Answer: SELECT employee.employee_id,employee.employee_name,employee.job_title, shop.shop_id,shop.shop_address FROM employee,shop WHERE employee.shop_id=shop.shop_id;

Results Explain Describe Saved SQL History

EMPLOYEE_ID	EMPLOYEE_NAME	JOB_TITLE	SHOP_ID	SHOP_ADDRESS
21	Digonto	selesman	1	Dhaka-Chittagong Highway
22	digu	selesman	105	Dhaka-Dinajpur Highway
23	nuhan	selesman	101	Dhaka-Chittagong Highway
24	arif	selesman	2	mirpur2
25	emon	selesman	3	Dhaka-sylhet Highway

5 rows returned in 0.00 seconds CSV Export

VIEW:

Question: 01

create or replace view b_view (bi_id, cus_id, tot_id) as select bill_id, customer_id, total_bill from bill where pay_amount>900 with read only;

Answer: select total_bill from bill where total_bill=(select total_bill from bill where payment_method='online');

Results Explain Describe Saved SQL History

TOTAL_BILL
1500
1500
1500

3 rows returned in 0.02 seconds CSV Export

Question: 02

Create a complex view called "Order_View"(case sensitive) from order table and which contains order id, product id and customer id. Make changes the names of order_id, product_id and customer_id to od_id, pd_id and cs_id(complex view)

Answer: create or replace view "Order_View" (od_id, pd_id,cs_id) as select order_id, product_id, customer_id from orde_r;

Results Explain Describe Saved SQL History

OD_ID	PD_ID	CS_ID
7	201	51
8	202	52
9	203	53
10	204	54
11	205	55

5 rows returned in 0.01 seconds CSV Export

RELATIONAL ALGEBRA:

1.Find the active hours of shop where shop id is 101.

Answer: ∏ active_hours(σ shop_id = "101"(shop))

2.Find the name of employee where salary is greater than 10000.

Answer: ∏ employee_name(σ salary >10000(employee)

3. Find the name of customer and customer's id where address is Dhaka.

Answer: ∏ customer_name, customer_id(σ customer_address = "Dhaka"(customer)

4.Find the name of importer and his shop id where address is bhola.

Answer: ∏ importer_name, shop_id(σ importer_address = "bhola"(importer)

5.Find the total quantity where product name is zilapi.

Answer: ∏ total_quantity(σ product_name = "zilapi"(product)

CONCLUSION:

The project based on superstore management system is very useful for big superstores as well as small ones to manage their inventories, staffs, and records of purchases and sales. New features and modules can be easily added into the system, so the project is very flexible and can adapt to the requirements of the superstores and its users.