



# American International University-Bangladesh

**WHERE LEADERS ARE CREATED**

## **SUPERSTORE MANAGEMENT SYSTEM**

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## **INTRODUCTION TO DATABASE [SECTION: B]**

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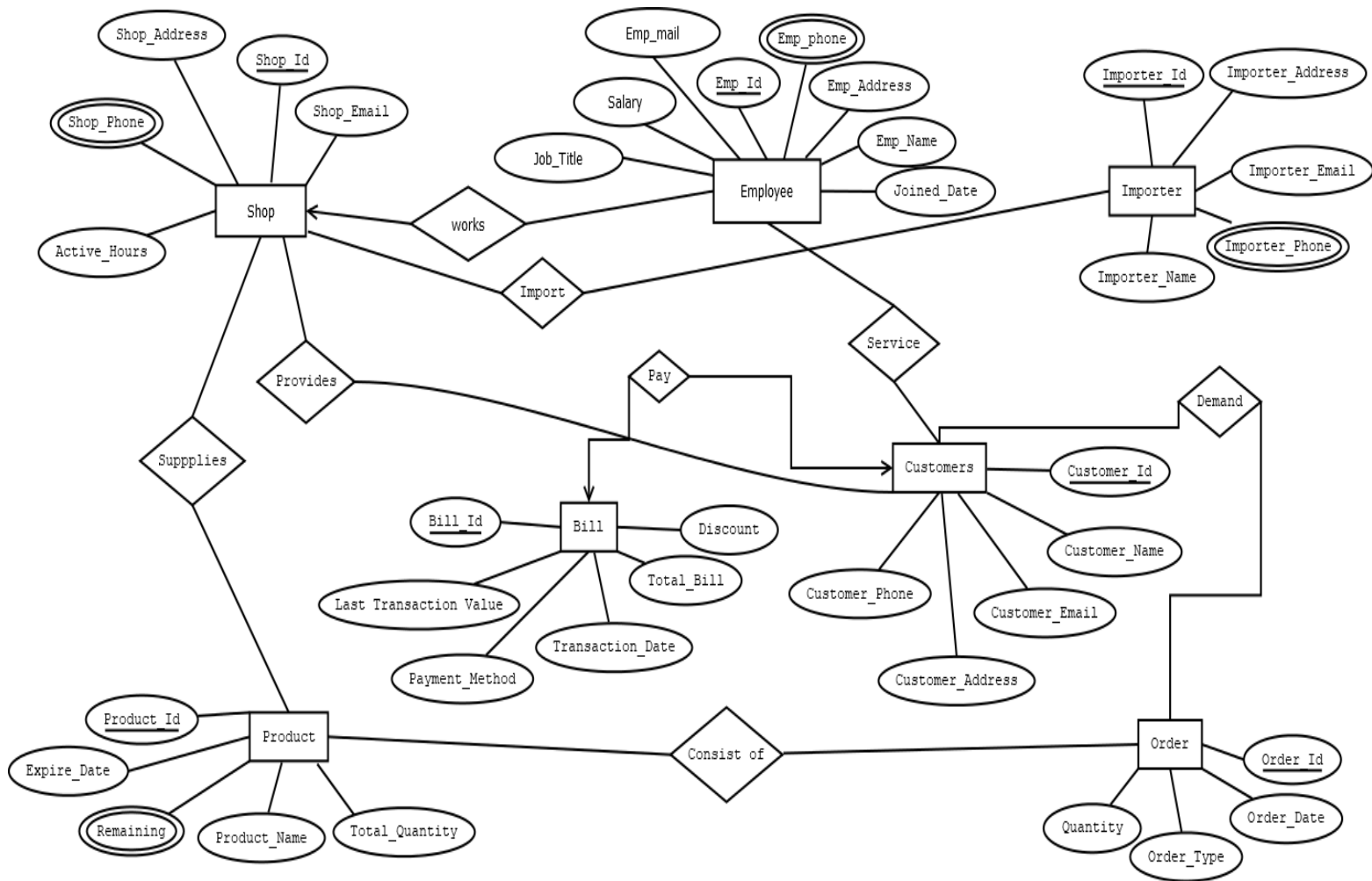
## **INTRODUCTION:**

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 Emp\_id, Emp\_Name, Emp\_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, Last Transaction\_value, Discount. A customer can pay one bill at a time and a bill can be for one customer.

## ER-DIAGRAM:



## **Normalization:**

### **Works**

UNF: (Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours, job\_title, salary, emp\_mail, emp\_id, emp\_phone, emp\_adress, emp\_name, joined\_date)

1NF: Shop\_phone & emp\_phone are multivalued attribute

2NF:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_adress, emp\_name, joined\_date, Shop\_id

3NF:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_adress, emp\_name, joined\_date, Shop\_id

no transitive dependency

### **Table Creation:**

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_adress, emp\_name, joined\_date, Shop\_id

### **Provides**

UNF:(Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours, customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email)

1NF: Shop\_phone is multivalued attribute

2NF:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email, Shop\_id

3NF:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email, Shop\_id

No transitive dependency

**Table Creation:**

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email,  
Shop\_id

**Service**

UNF: (emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_adress, emp\_name, joined\_date, customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email)

1NF: emp\_phone is a multivalued attribute

2NF:

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_adress, emp\_name, joined\_date

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

empcus\_id, emp\_id, customer\_id

3NF:

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_adress, emp\_name, joined\_date

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

empcus\_id, emp\_id, customer\_id

No transitive dependency

**Table Creation:**

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_adress, emp\_name, joined\_date

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

empcus\_id, emp\_id, customer\_id

**Import**

UNF:(Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours, Importer\_id, importer\_address, importer\_email, importer\_phone, importer\_name )

1NF: shop\_phone & importer\_phone are multivalued attributes

2NF:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

Importer\_id, importer\_address, importer\_email, importer\_phone, importer\_name

Shoimp\_id, shop\_id, importer\_id

3NF:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

Importer\_id, importer\_address, importer\_email, importer\_phone, importer\_name

Shoimp\_id, shop\_id, importer\_id

No transitive dependency

#### Table Creation:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

Importer\_id, importer\_address, importer\_email, importer\_phone, importer\_name

Shoimp\_id, shop\_id, importer\_id

#### Supplies

UNF:(Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours, product\_id, expire\_date, remaining, product\_name, total\_quantity)

1NF: shop\_phone and remaining are multivalued attribute

2NF: Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

product\_id, expire\_date, remaining, product\_name, total\_quantity, shop\_id

3NF: Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

product\_id, expire\_date, remaining, product\_name, total\_quantity, shop\_id

No transitive dependency

Table Creation:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

product\_id, expire\_date, remaining, product\_name, total\_quantity, shop\_id

#### Consist of

UNF:(order\_id, order\_type, quantity, order\_date, product\_id, expire\_date, remaining, product\_name, total\_quantity)

1NF: remaining is a multivalued attribute



2NF: order\_id, order\_type, quantity, order\_date

product\_id, expire\_date, remaining, product\_name, total\_quantity

ordpro\_id, order\_no, product\_id

3NF: order\_id, order\_type, quantity, order\_date

product\_id, expire\_date, remaining, product\_name, total\_quantity

ordpro\_id, order\_no, product\_id

No transitive dependency

#### Table Creation:

order\_id, order\_type, quantity, order\_date

product\_id, expire\_date, remaining, product\_name, total\_quantity

ordpro\_id, order\_no, product\_id

#### Demand

UNF: (order\_id, order\_type, quantity, order\_date, customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email )

1NF: no multivalued attribute

2NF: order\_id, order\_type, quantity, order\_date

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

ordcus\_id, order\_id, customer\_id

3NF: order\_id, order\_type, quantity, order\_date

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

ordcus\_id, order\_id, customer\_id

No transitive dependency

#### Table Creation:

order\_id, order\_type, quantity, order\_date

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

ordcus\_id, order\_id, customer\_id

## Pay

UNF:(customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email, bill\_id, Last transaction value, payment\_method, transaction\_date, total\_bill, discount)

1NF: no multivalued attribute

2NF: customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

bill\_id, Last transaction value, payment\_method, transaction\_date, total\_bill, discount, customer\_id

3NF: customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

bill\_id, Last transaction value, payment\_method, transaction\_date, total\_bill, discount, customer\_id

No transitive dependency

### Table Creation:

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email

bill\_id, Last transaction value, payment\_method, transaction\_date, total\_bill, discount, customer\_id

## Temporary table:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_address, emp\_name, joined\_date, Shop\_id

~~Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours~~

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email,  
Shop\_id

~~emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_address, emp\_name, joined\_date~~

~~customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email~~

empcus\_id, emp\_id, customer\_id

~~Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours~~

Importer\_id, importer\_address, importer\_email, importer\_phone, importer\_name  
Shoimp\_id, shop\_id, importer\_id

~~Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours~~

product\_id, expire\_date, remaining, product\_name, total\_quantity, shop\_id

order\_id, order\_type, quantity, order\_date

~~product\_id, expire\_date, remaining, product\_name, total\_quantity~~

ordpro\_id, order\_no, product\_id

~~order\_id, order\_type, quantity, order\_date~~

~~customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email~~

ordcus\_id, order\_id, customer\_id

~~customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email~~

bill\_id, Last transaction value, payment\_method, transaction\_date, total\_bill, discount, customer\_id

## Final Table:

Shop\_id, shop\_address, shop\_email, shop\_phone, active\_hours

emp\_id, job\_title, salary, emp\_mail, emp\_phone, emp\_address, emp\_name, joined\_date, Shop\_id

customer\_phone, customer\_id, customer\_name, customer\_address, customer\_email,  
Shop\_id

empcus\_id, emp\_id, customer\_id

Importer\_id, importer\_address, importer\_email, importer\_phone, importer\_name

Shoimp\_id, shop\_id, importer\_id

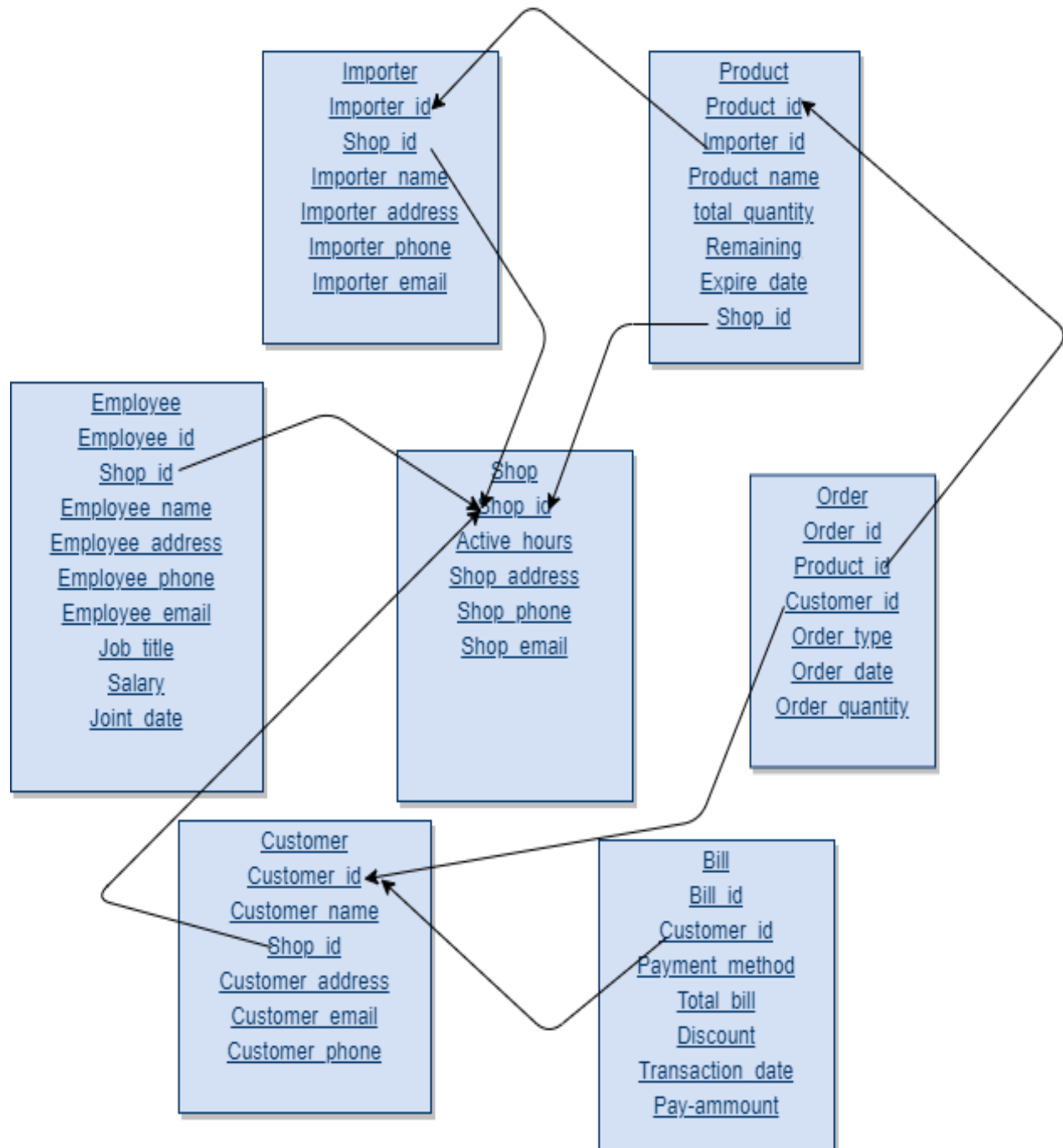
product\_id, expire\_date, remaining, product\_name, total\_quantity, shop\_id

order\_id, order\_type, quantity, order\_date

ordpro\_id, order\_no, product\_id

ordcus\_id, order\_id, customer\_id

bill\_id, Last transaction value, payment\_method, transaction\_date, total\_bill, discount, customer\_id

**SCHEMA DIAGRAM:**

```
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));
```

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	-	-	-	✓	-	-

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									

```
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));
```

```
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));
```



**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
<u>BILL</u>	<u>BILL_ID</u>	Number	-	10	0	1	-	-	-
	<u>CUSTOMER_ID</u>	Number	-	10	0	-	✓	-	-
	<u>PAYMENT_METHOD</u>	Varchar2	20	-	-	-	✓	-	-
	<u>TOTAL_BILL</u>	Number	-	10	0	-	✓	-	-
	<u>DISCOUNT</u>	Varchar2	10	-	-	-	✓	-	-
	<u>TRANSACTION_DATE</u>	Date	7	-	-	-	✓	-	-
	<u>PAY_AMOUNT</u>	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');
```

```
insert into shop values(1, '7 am-1am', 'Dhaka-chittagong Highway', 152356656, 'abc2@gmail.com');
```

```
insert into shop values(2, '7 am-1am', 'Mirpur2', 17887882, 'rupa@gmail.com');
```

```
insert into shop values(3,'7 am-9pm','Dhaka-Sylhet Highway',152996684,'abc3@gmail.com');
```

```
insert into shop values(4, '7 am-10pm', 'Dhaka-comilla Highway', 15245678, 'abc4@gmail.com');
```

```
insert into shop values(105, '7 am-11pm', 'Dhaka-Dinajpur Highway', 15234587, 'abc5@gmail.com');
```

Results	Explain	Describe	Saved SQL	History
SHOP_ID	ACTIVE_HOURS	SHOP_ADDRESS	SHOP_PHONE	SHOP_EMAIL
101	7 am- 7pm	Dhaka-Chittagong Highway	152356656	abc1@gmail.com
1	7 am - 1 am	Dhaka-Chittagong Highway	152356656	abc1@gmail.com
2	7 am- 1 am	mirpur2	17887882	rupa@gmail.com
3	7 am- 9pm	Dhaka-sylhet Highway	152996684	abc3@gmail.com
4	7 am-10pm	Dhaka-comilla Highway	15245678	abc4@gmail.com
105	7 am-11pm	Dhaka-Dinajpur Highway	15234587	abc5@gmail.com

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

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 ;

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;

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;

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](#)

Results	Explain	Describe	Saved SQL	History
EMPLOYEE_NAME				
arif				

**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;

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;

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 a view called OrderView based on the order\_id and order\_type from the Order.

**Answer:** create view Orderview as select order\_id, order\_type from orde\_r;

- Display all the contents of the OrderView view.
- ans:- select \*from Orderview;

ORDER_ID	ORDER_TYPE
7	On Demand
8	On Demand
9	On Demand
10	On Demand
11	On Demand

5 rows returned in 0.00 seconds

[CSV Export](#)

**Question: 02**

Create a complex view as Employeeview that contains minimum, maximum, average salary to display values from shop and employees.

**Answer:** -: CREATE VIEW Employeeview(id, minsal, maxsal, avgsal)AS SELECT s.shop\_id, MIN(e.salary), MAX(e.salary),AVG(e.salary) FROM employee e, shop s WHERE e.shop\_id=s.shop\_id GROUP BY s.shop\_id;

- Display all the contents of the Employeeview
- ans : select \* from Employeeview;

ID	MINSAL	MAXSAL	AVGSAL
1	10000	10000	10000
2	16000	16000	16000
101	10000	10000	10000
105	15000	15000	15000
3	10000	10000	10000

5 rows returned in 0.01 seconds

[CSV Export](#)

**RELATIONAL ALGEBRA:**

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

Answer:  $\Pi_{active\_hours} (\sigma_{shop\_id = "101"} (shop))$

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

Answer:  $\Pi_{employee\_name} (\sigma_{salary > 10000} (employee))$

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

Answer:  $\Pi_{customer\_name, customer\_id} (\sigma_{customer\_address = "Dhaka"} (customer))$

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

Answer:  $\Pi_{importer\_name, shop\_id} (\sigma_{importer\_address = "Barisal"} (importer))$

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

Answer:  $\Pi_{total\_quantity} (\sigma_{product\_name = "Apple"} (product))$



**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.