**American International University Bangladesh**

**Course Title:** Introduction to Database

**Faculty:** SIFAT RAHMAN AHONA

**Section:** L

**Group Number:** 10

**Project title:**Pastry shop management system

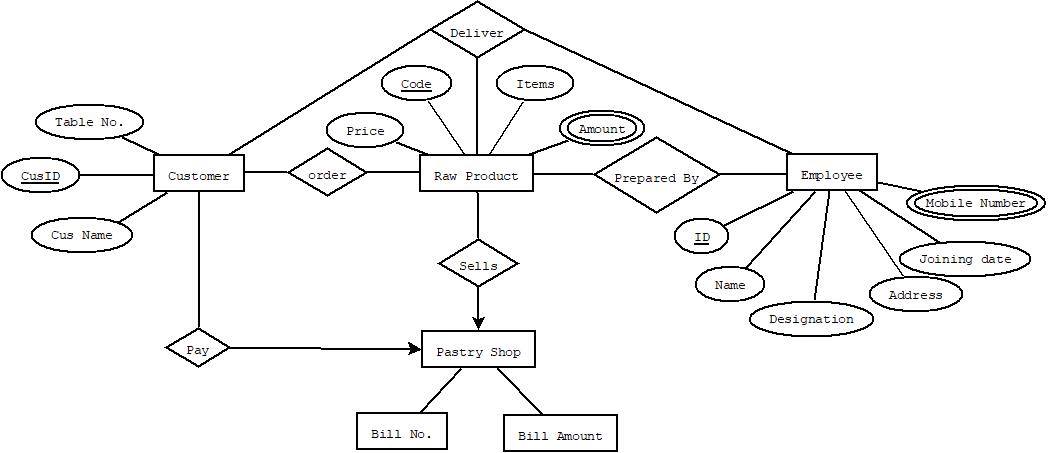
|  |  |
| --- | --- |
| ID | Name |
| 19-39809-1 | Nebadeta Nath Tonney |
| 19-39835-1 | Dardina Sara Narisha Dardina Sara Narisha |
| 19-39821-1 | Nazmun Nahar Akhi Nazmun Nahar Akhi |
| 19-40403-1 | Turzo Roy |

***Pastry shop management system***

**Introduction**

The project is about Pastry shop management system. We try to make a better management system that will help both the owner and employees to maintain orders and customer satisfaction easily and also keep records of everything related to sell. The management system keeps data of every customer's name, order, table number, bill number and amount to be paid. The pastry shop also sells raw products. The system keeps a data of the raw products sold to the consumers. The pastry shop stores the item names, codes and prices. Bill number and bill amount are also stored. The system has every data stored for the employee details like their Id, name, salary, address, phone number, designation, joining date. This database management system will help keep track of orders, employees and deliveries. At last, we would try to create a database management system that will be easier to use for the operators and useful for the pastry shop.

**ER diagram**



# **NORMALIZATION**

**Prepared By** (**id**, name, salary, designation, address, mobile number, joining date, code, items, price, amount)

1 NF: **mobile number and amount are multivalued attribute.**

2 NF: id, name, salary, designation, address, mobile number, joining date;

code, items, price, amount;

3 NF: Id, name, address, joining date;

sid, salary, designation, mobile number;

code, items, price, amount;

**Table :**

Id, name, address, joining date;

sid, salary, designation, mobile number;

code, items, price, amount;

**order**(cus id, cus name, table no, code, items, price, amount)

1 NF: **Amount is a multivalued attribute.**

2 NF: cus id, cus name, table no;

code, items, price, amount;

3 NF: **No transitive dependency.**

cus id, cus name, table no;

code, items, price, amount;

**Table** :

cus id, cus name, table no;

code, items, price, amount;

**pay**(cus id, cus name, table no, bill no, bill\_ amount)

1 NF: **No multivalued attribute.**

2 NF: cus id, cus name, table no;

bill no, bill\_ amount;

3 NF: **No transitive dependency.**

cus id, cus name, table no;

bill no, bill\_ amount;

**Table :**

cus id, cus name, table no;

bill no, bill\_amount;

**sells** (code, items, price, amount, bill no, bill\_ amount)

1 NF: **Amount is a multivalued attribute.**

2 NF: code, items, price, amount;

bill no, bill\_ amount;

3 NF: **No transitive dependency.**

code, items, price, amount;

bill no, bill\_ amount;

**Table:**

code, items, price,amount;

bill no, bill\_ amount;

**deliver**(cus id, cus name, table no, id, name, salary, designation, address, mobile number, joining date)

1 NF: **Mobile number is a multivalued attribute.**

2 NF: cus id, cus name, table no;

id, name, salary, designation, address, mobile number, joining date;

3 NF: cus id, cus name, table no;

id, name, address, mobile number, joining date;

sid, salary, designation;

**Table:**

cus id, cus name, table no;

id, name, address, mobile number, joining date;

sid, salary, designation;

**Total Table:**

~~Id, name, address, joining date;~~

sid, salary, designation, mobile number;

~~code, items, price, amount;~~

~~cus id, cus name, table no;~~

~~code, items, price, amount;~~

cus id, cus name, table no;

bill no, bill\_amount;

code, items, price,amount;

~~bill no, bill\_ amount;~~

~~cus id, cus name, table no;~~

id, name, address, mobile number, joining date;

~~sid, salary, designation;~~

**Final Table:**

sid, salary, designation, mobile number;

cus id, cus name, table no;

bill no, bill\_amount;

code, items, price,amount;

id, name, address, mobile number, joining date;

**Table Creation**

1.Table:

CREATE TABLE my\_table

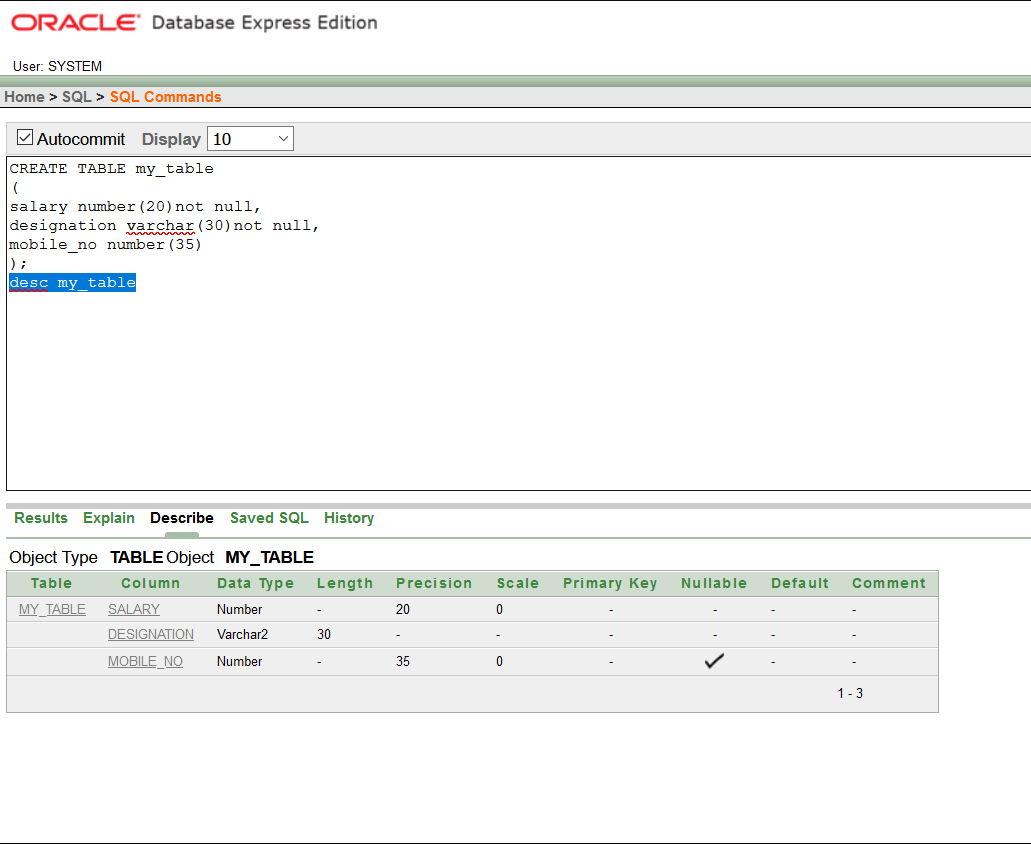
(

salary number(20)not null,

designation varchar(30)not null,

mobile\_no number(35)

);



2.table:

CREATE TABLE customer\_

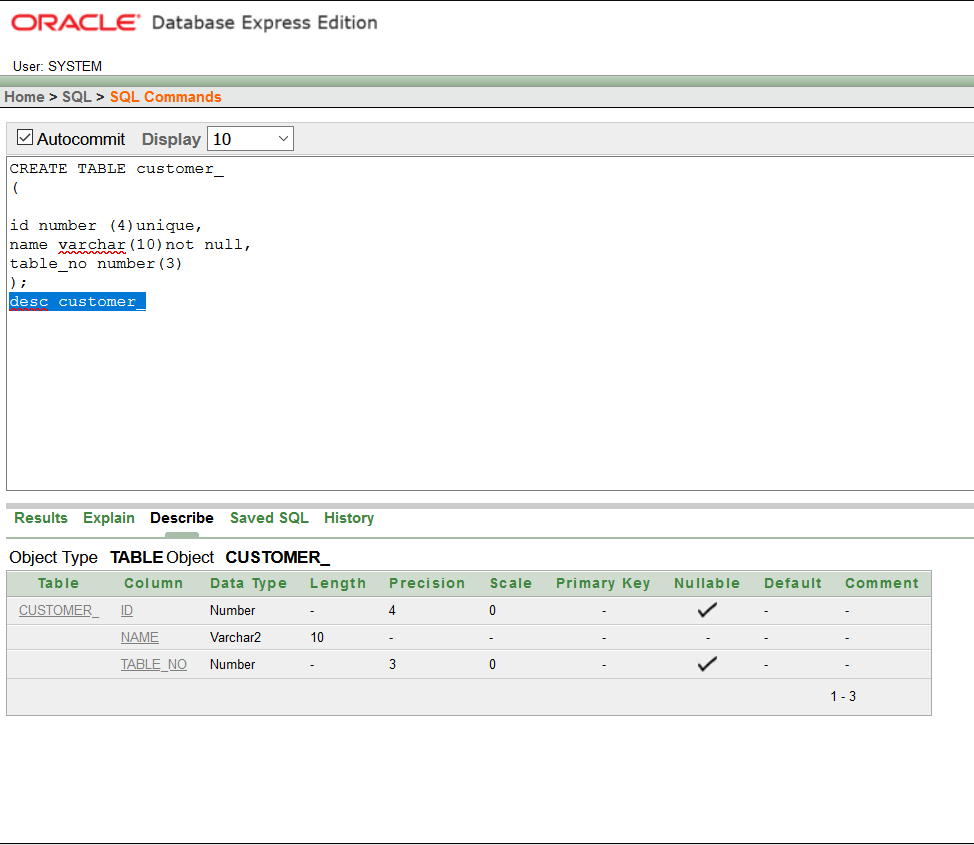
(

id number (4)unique,

name varchar(10)not null,

table\_no number(3)

);



3.Table

CREATE TABLE customer\_bill

(

bill\_no number (10)not null,

bill\_amount number(15)not null

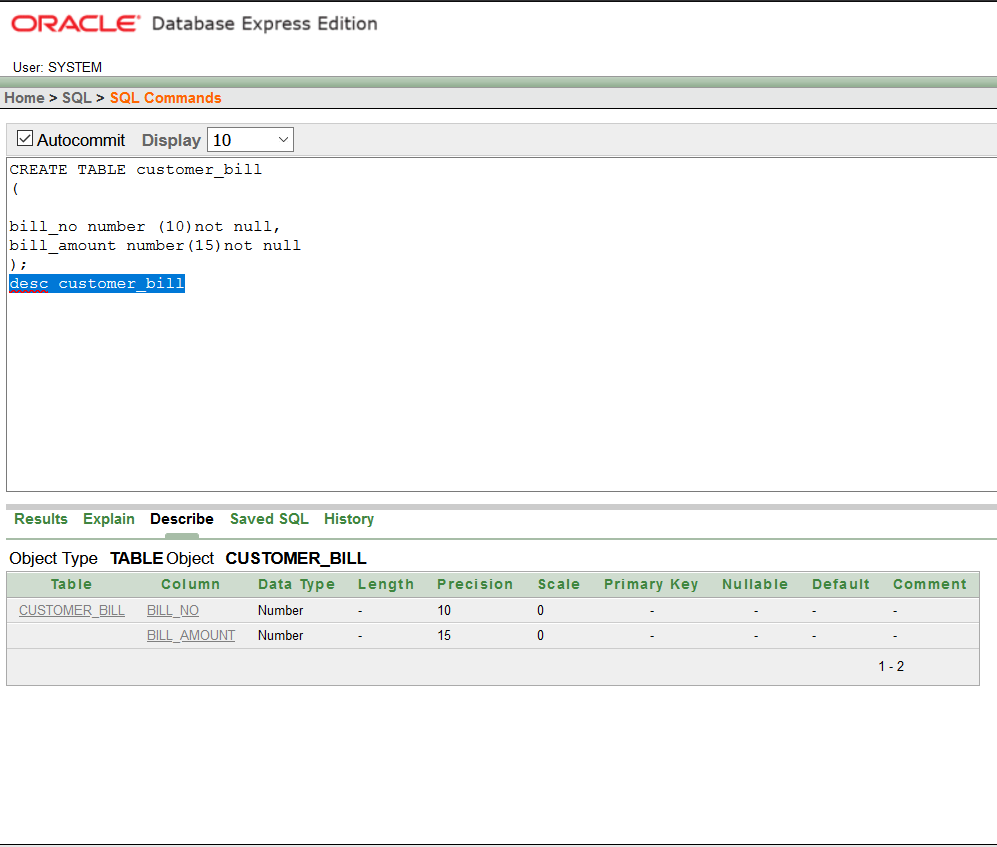
); CREATE TABLE customer\_bill

(

bill\_no number (10)not null,

bill\_amount number(15)not null

);



4.table:

CREATE TABLE product\_

(

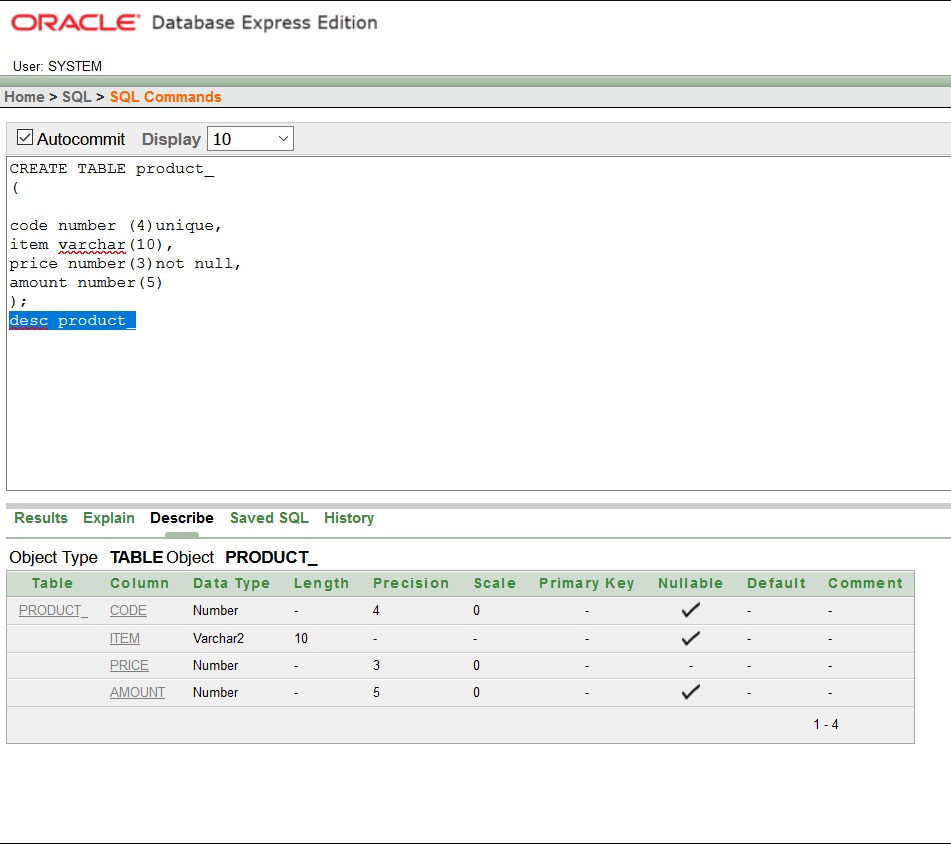
code number (4)unique,

item varchar(10),

price number(3)not null,

amount number(5)

);



5.table:

CREATE TABLE employees\_

(

id number(4)unique,

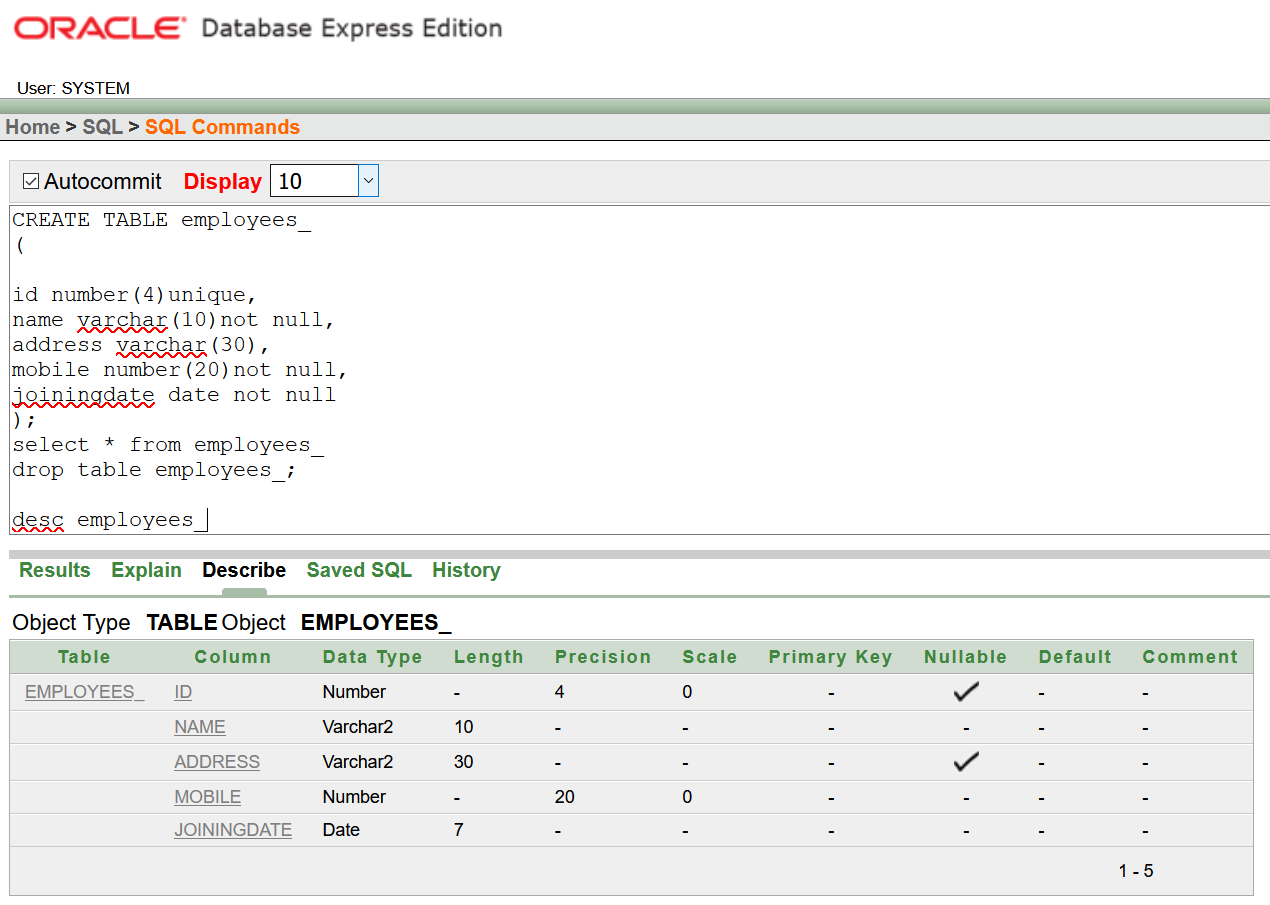
name varchar(10)not null,

address varchar(30),

mobile number(20)not null,

joiningdate date not null

);



**Data insertion**

1. INSERT INTO my\_table (SALARY, DESIGNATION, MOBILE\_NO)

VALUES (5000, 'WAITER', 985005636);

INSERT INTO my\_table

VALUES (8000, 'RECEPTIONIST', 985545636);

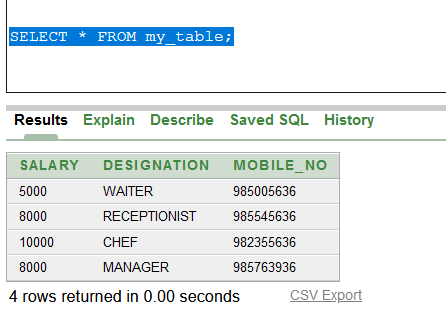
INSERT INTO my\_table

VALUES (10000, 'CHEF', 982355636);

INSERT INTO my\_table

VALUES (8000, 'MANAGER', 985763936);

SELECT \* FROM my\_table;



2. desc customer\_

INSERT INTO customer\_ (ID, NAME,TABLE\_NO)

VALUES (2118, 'S Rogers', 03);

INSERT INTO customer\_ (ID, NAME,TABLE\_NO)

VALUES (2119, 'T Stark', 04);

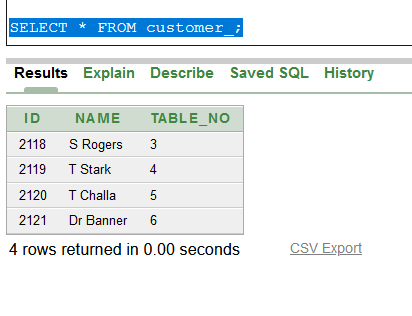
INSERT INTO customer\_ (ID, NAME,TABLE\_NO)

VALUES (2120, 'T Challa', 05);

INSERT INTO customer\_ (ID, NAME,TABLE\_NO)

VALUES (2121, 'Dr Banner', 06);

SELECT \* FROM customer\_;



3. desc customer\_bill

INSERT INTO customer\_bill (BILL\_NO, BILL\_AMOUNT)

VALUES (32, 1500);

INSERT INTO customer\_bill (BILL\_NO, BILL\_AMOUNT)

VALUES (34, 1800);

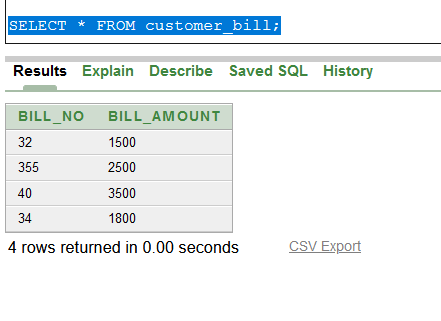
INSERT INTO customer\_bill (BILL\_NO, BILL\_AMOUNT)

VALUES (355, 2500);

INSERT INTO customer\_bill (BILL\_NO, BILL\_AMOUNT)

VALUES (40, 3500);

SELECT \* FROM customer\_bill;



4. desc product\_

INSERT INTO product\_ (CODE, ITEM, PRICE, AMOUNT)

VALUES (203, 'red velvet', 500, 540);

INSERT INTO product\_ (CODE, ITEM, PRICE, AMOUNT)

VALUES (204, 'Pound', 400, 430);

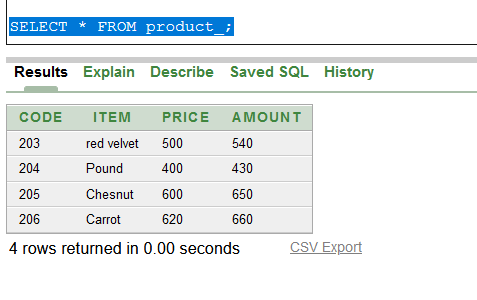
INSERT INTO product\_ (CODE, ITEM, PRICE, AMOUNT)

VALUES (205, 'Chesnut', 600, 650);

INSERT INTO product\_ (CODE, ITEM, PRICE, AMOUNT)

VALUES (206, 'Carrot', 620, 660);

SELECT \* FROM product\_;



**Sequence**

5. desc employees

create sequence empseq start with 1021 increment by 1;

INSERT INTO employees\_ (ID, NAME, ADDRESS, MOBILE, JOININGDATE)

VALUES (empseq.nextval, 'TONNEY', 'KHAN MANJIL', 13215415441, (to\_date('02/02/02','dd/mm/yyyy'))

);

INSERT INTO employees\_ (ID, NAME, ADDRESS, MOBILE, JOININGDATE)

VALUES (empseq.nextval, 'AKHI', 'BASUNDHORA', 14682415441, (to\_date('03/03/03','dd/mm/yyyy'))

);

INSERT INTO employees\_ (ID, NAME, ADDRESS, MOBILE, JOININGDATE)

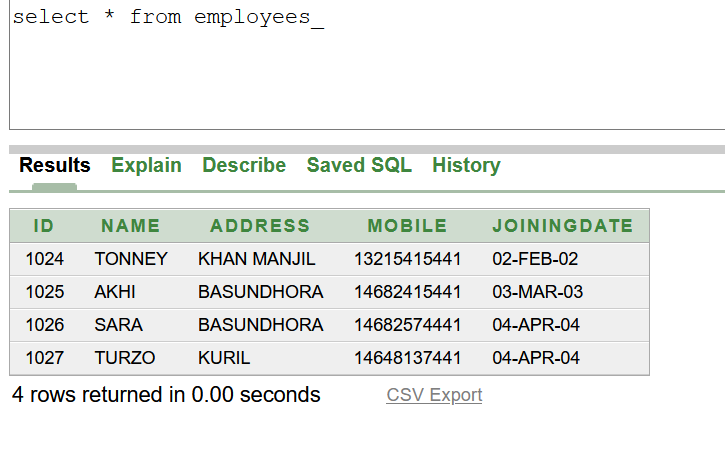
VALUES (empseq.nextval, 'SARA', 'BASUNDHORA', 14682574441, (to\_date('04/04/04','dd/mm/yyyy'))

);

INSERT INTO employees\_ (ID, NAME, ADDRESS, MOBILE, JOININGDATE)

VALUES (empseq.nextval, 'TURZO', 'KURIL', 14648137441, (to\_date('04/04/04','dd/mm/yyyy')));

select \* from employees\_

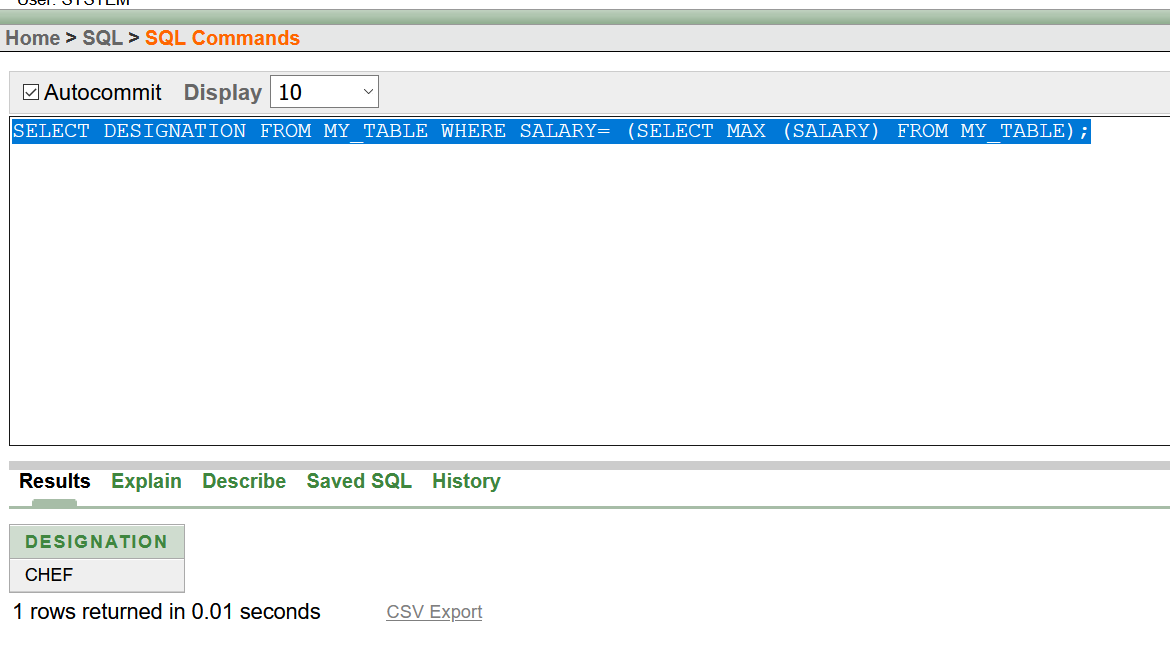


**Query writing:**

1.**Sub query**

Q:Write a sql query to display the designation who is taking the maximum salary from my\_table table.

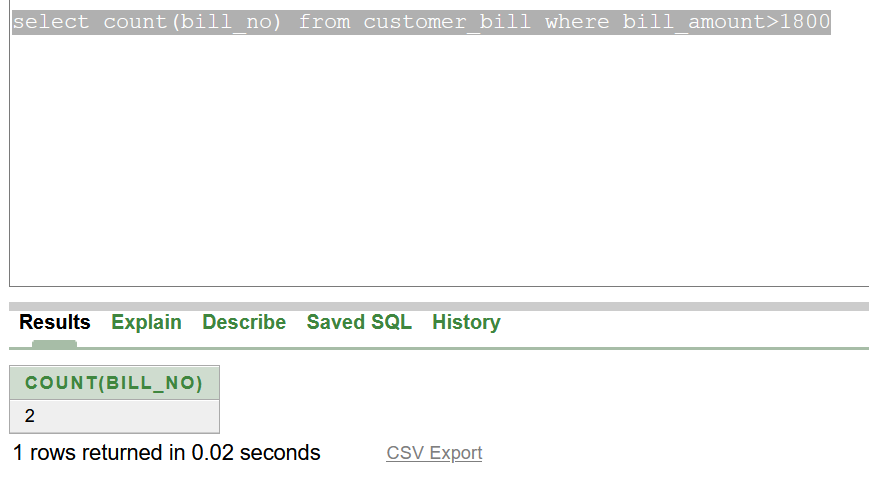
A: SELECT DESIGNATION FROM MY\_TABLE WHERE SALARY= (SELECT MAX (SALARY) FROM MY\_TABLE);



2.**Group function**

Q: find the bill number of customer\_bill who have paid more than 1800.

A:select count(bill\_no) from customer\_bill where bill\_amount>1800



3.**Single row function**

Q: print code number and price from product\_ table and price in ascending order.

A: select code "code",price "price"from product\_ order by price asc



**Relational Algebra:**

**1.** bill\_no(bill\_amount>1800(customer\_bill))