جامعة أم القرى
UMM AL-QURA UNIVERSITY

# DATABASE PROJECT

## HOTEL MANAGEMENT DATABASE

GROUP2


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# PHASE1

## BUSINESS RULES

- The hotel employee reserves rooms for customers.
- Hotel employees' data is name ,date of birth, job number, age(calculated ),and salary.
- The hotel requires that the customer's data be registered, which is the name, phone number, and ID number.
- The hotel system reserves only one room for each customer in each reservation process and records the reservation date, expiration date, and room number, SRnum.
- Customers can purchase from the hotel's restaurant(room service) , and the hotel stores a list of the foods available to it by registering the food code, name, price, and a brief overview of it.

is a hotel management system consisting of five main tables: customers, buy, hotelemployee, reservation, and roomservices. In the customers

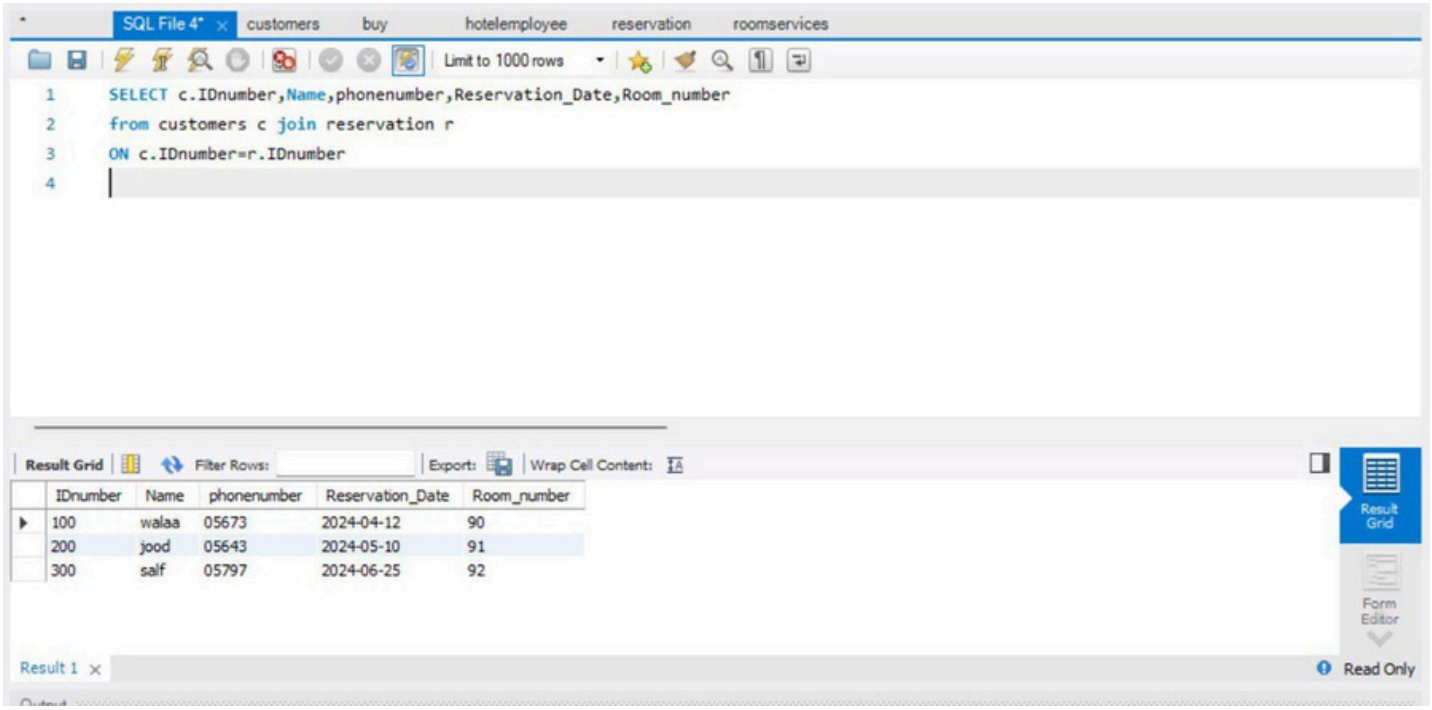
table, customer data such as ID number, phone number, name, email, and hotel employee ID number are recorded. The buy table contains purchase data including food code and customer ID number.

The hotelemployee table stores data of hotel employees like ID number, name, salary, date of birth, and job title. The reservation table allows hotel employees to reserve rooms for customers, recording reservation date, room number, expiration date, and SRnum.

The roomservices table includes information about available food items for purchase from the hotel's restaurant, such as food code, price, name, and description.

the system enables hotel employees to book rooms for customers while storing customer and employee data. Customers can also make purchases from the hotel's restaurant, with details of these transactions being recorded.

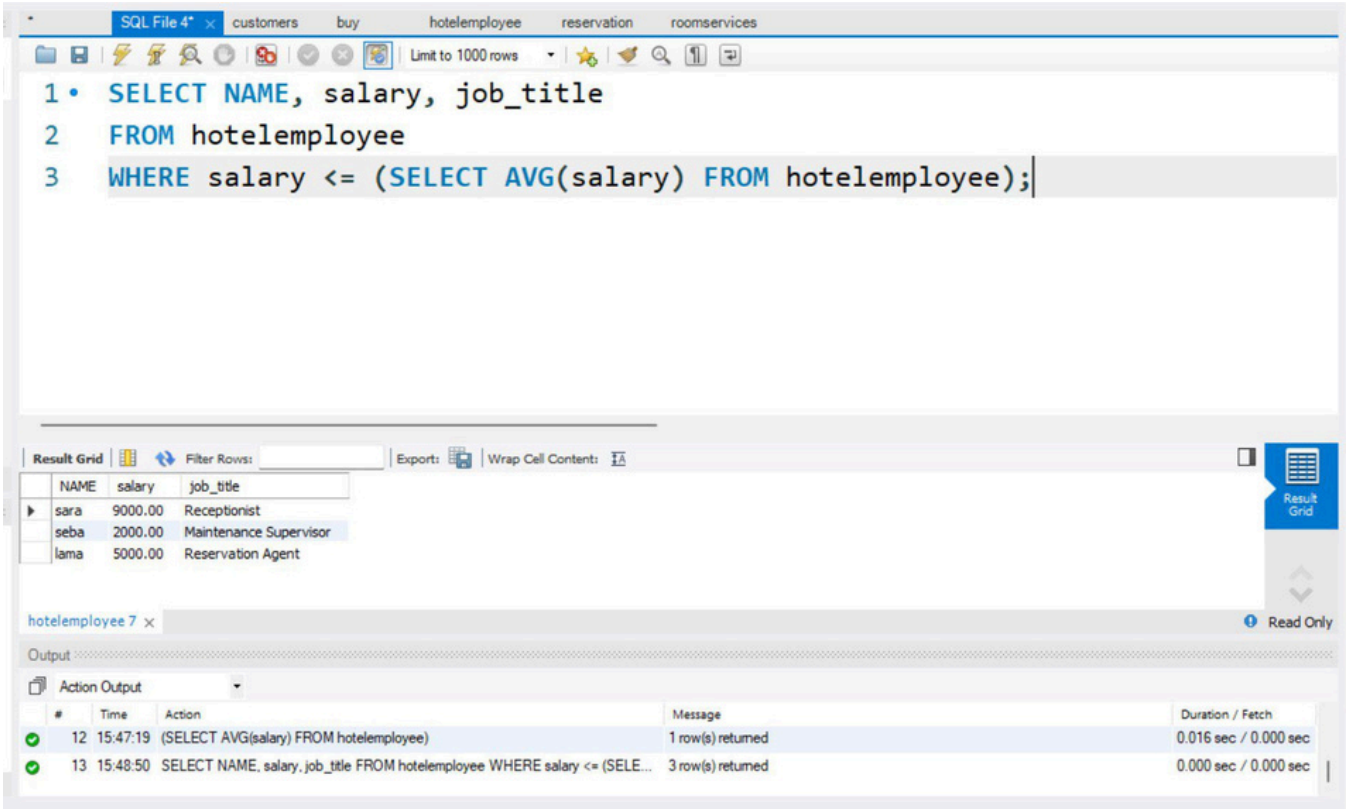
# Join




Display the name, id number, phone number, from customers table , reservation date room number from reservation table

use a join operation based on the ID number to link the two tables together.

# subquery




Displays the name, salary and job_title from the hotelemployee table
If their salary is less than or equal to the average salary

# procedure

SQL File 4* | hotelemployee

```
1  DELIMITER $$
2  CREATE PROCEDURE hotelemployee()
3  BEGIN
4     SELECT Name ,salary , job_title
5     from hotelemployee
6     ORDER by salary;
7  END $$
8  DELIMITER $$
9  CALL hotelemployee();
10
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| Name | salary | job_title |
|---|---|---|
| seba | 2000.00 | Maintenance Supervisor |
| lama | 5000.00 | Reservation Agent |
| sara | 9000.00 | Receptionist |
| mary | 87200.00 | Restaurant Waiter |

SQL File 4* | customers | reservation | customers

```
1  DELIMITER $$
2  CREATE PROCEDURE getReservation_info(
3  IN customerID INTEGER(50)
4  )
5  BEGIN
6      SELECT Reservation_Date , Room_number , Expiration_date
7      from reservation r
8      INNER JOIN customers c ON r.IDnumber = c.IDnumber
9      WHERE c.IDnumber = customerID;
10 END $$
11 DELIMITER $$
12 CALL getReservation_info(300);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| Reservation_Date | Room_number | Expiration_date |
|---|---|---|
| 2024-06-25 | 92 | 2024-05-30 |

# trigger

```
DELIMITER $$
CREATE TRIGGER afterroomservicesUpdate
AFTER update ON roomservices
FOR EACH ROW
BEGIN
    if OLD.price <> new.price then
    INSERT INTO ChangePrice (Food_code , beforChange , afterChange , date)
    VALUES (old.Food_code , old.price , new.price ,NOW());
END if;
END $$
DELIMITER ;

UPDATE roomservices
SET price = 20
WHERE Food_code = 900
```

```
DELIMITER $$
CREATE TRIGGER afterroomservicesUpdate
AFTER update ON roomservices
FOR EACH ROW
BEGIN
    if OLD.price <> new.price then
    INSERT INTO ChangePrice (Food_code , beforChange , afterChange , date)
    VALUES (old.Food_code , old.price , new.price ,NOW());
END if;
END $$
DELIMITER ;

SELECT * FROM ChangePrice
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| Food_code | beforChange | afterChange | date |
|---|---|---|---|
| 900 | 40.00 | 20.00 | 2024-10-29 |

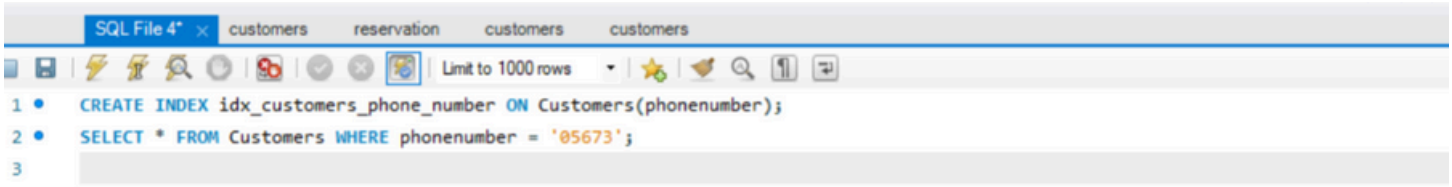
Result Grid

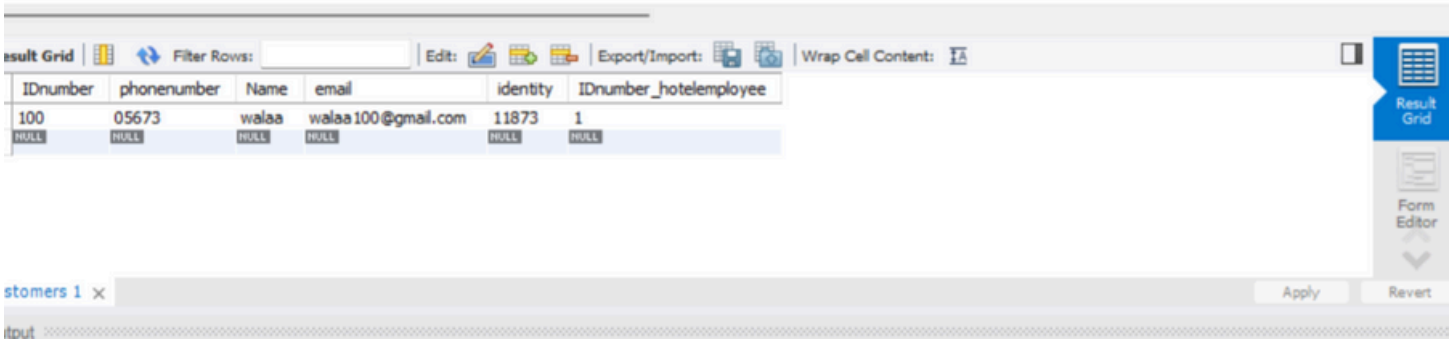
Form Editor

ChangePrice 2 ×

Read Only

# index


SQL File 4*
customers
reservation
customers
customers
Limit to 1000 rows
1 CREATE INDEX idx_customers_phone_number ON Customers(phonenumber);
2 SELECT * FROM Customers WHERE phonenumber = '05673';
3


Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
IDnumber
phonenumber
Name
email
identity
IDnumber_hotelemployee
100
05673
walaa
walaa100@gmail.com
11873
1
Result Grid
Form Editor
Apply
Revert