DBMS MINI-PROJECT
RESTAURANT MANAGEMENT SYSTEM

(MIS NO`s. 111903135, 111903137)

Problem Statement:

Creating a database management system for a restaurant to manage customers, employees, orders and food items.

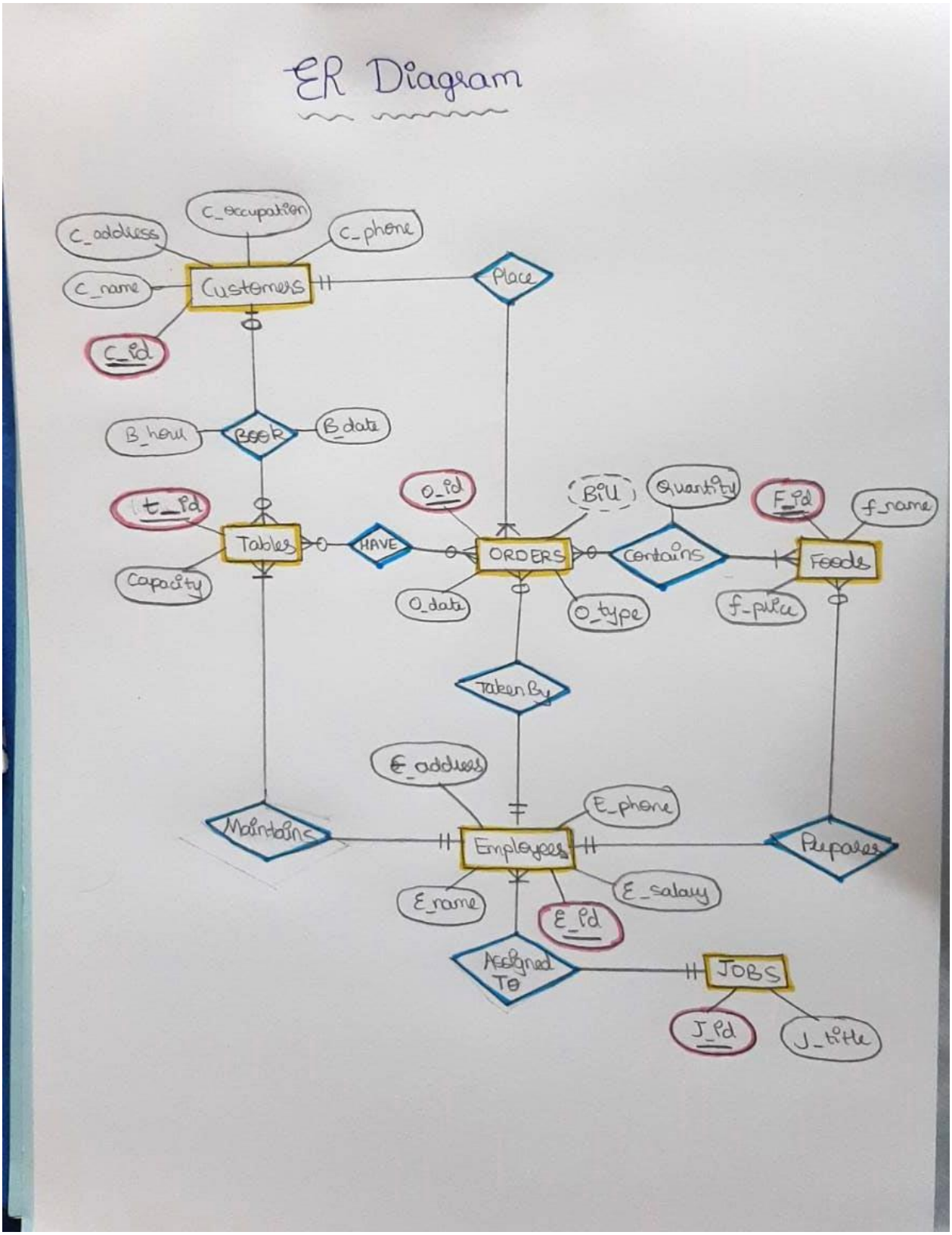
Objectives:

- The database would contain data about the customers and employees as well as food items and order details.
- This restaurant management database can monitor the employees of the restaurant to ensure proper management of the restaurant.
- To enhance efficiency to be able to manage the restaurant in a better manner.

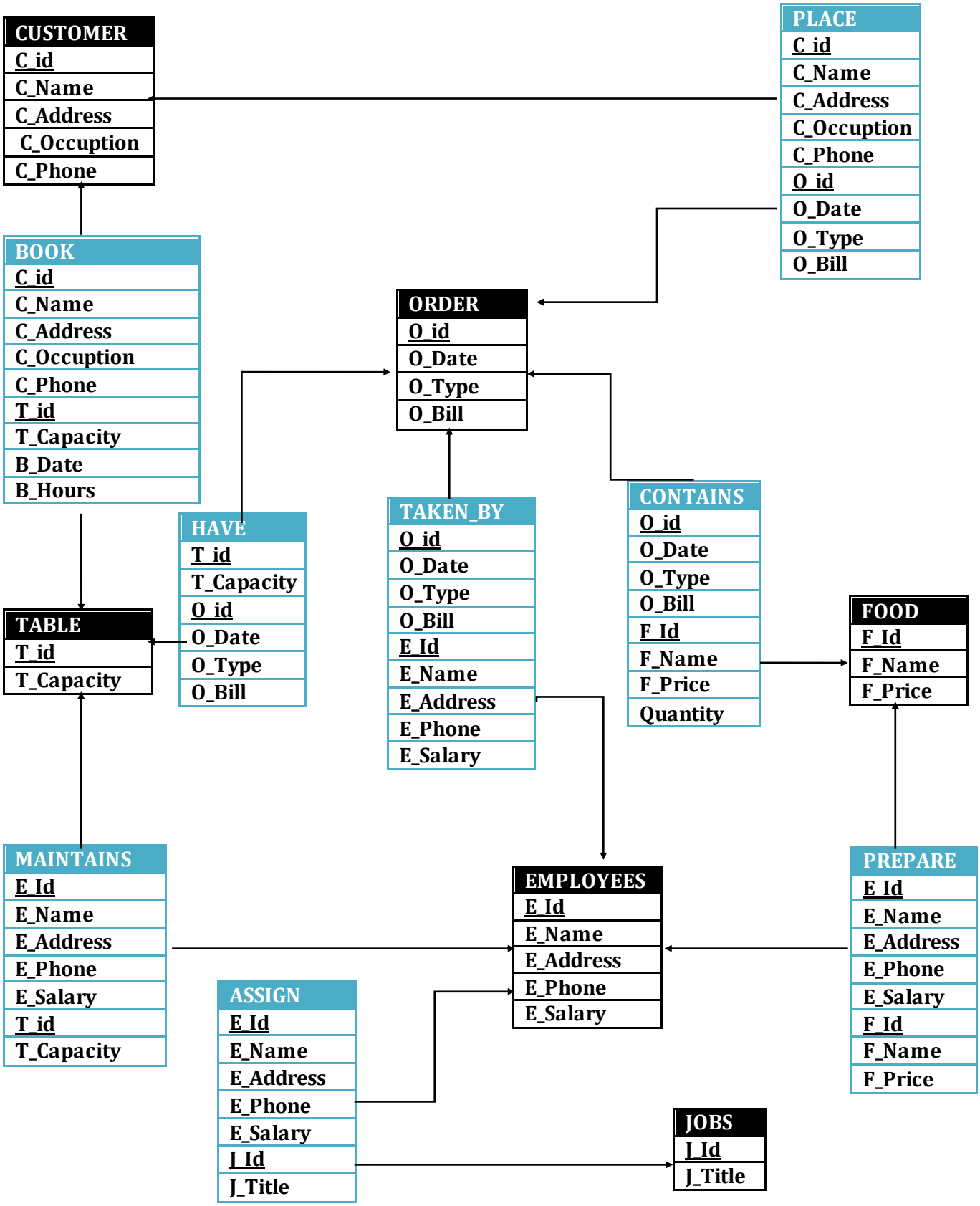
Functional Requirements:

- ❖ The system is able to see bookings or orders of a restaurant.
- ❖ To find out all employees and monitor their activity.
- ❖ To be able to identify best selling and least selling food items.

ER Diagram:


ER Diagram
C_occupation
C_address
C_phone
C_name
Customers
Place
C_id
B_hour
Book
B_date
t_id
Tables
HAVE
O_id
Bill
Quantity
ORDERS
Contains
F_id
f_name
Foods
Capacity
O_date
O_type
f_price
Taken By
E_address
E_phone
Maintains
Employees
Prepares
E_name
E_id
E_salary
Assigned To
JOBS
J_id
J_title

Relational Schemas:



Functional Dependencies:

(CUSTOMER)c_id -> (CUSTOMER) c_name, c_address, c_phone, c_occupation

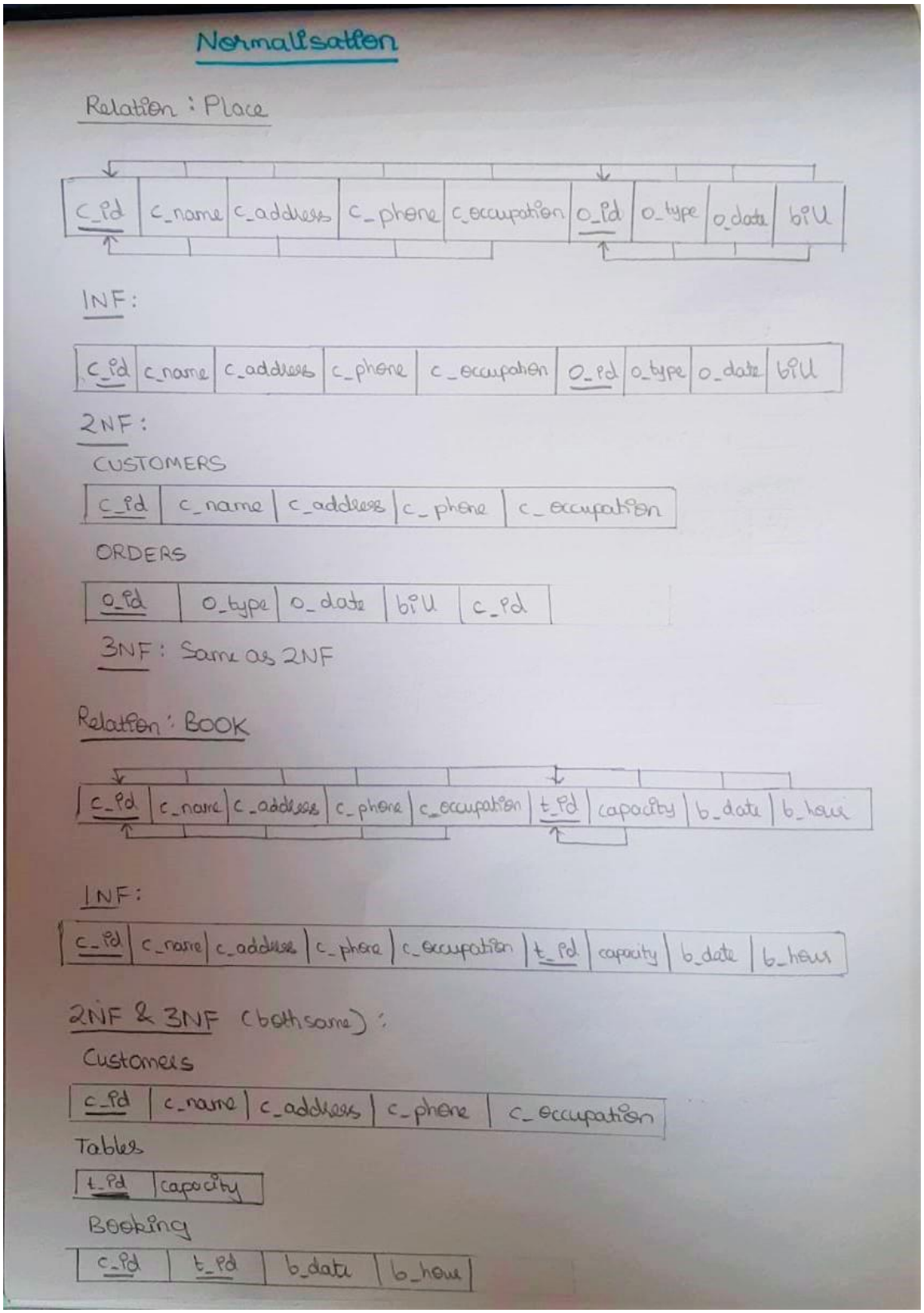
(tables)t_id -> (tables) t_id, capacity, e_id

(Orders) o_id -> (Orders)o_date, o_type

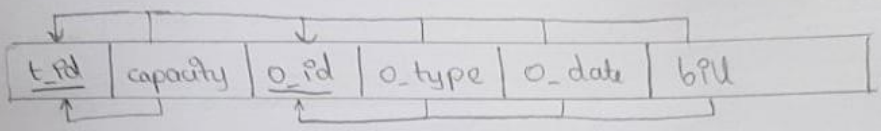
(Foods) f_id -> (Foods)f_name, f_price

(Employees) e_id -> (Employees)e_name, e_address, e_salary, e_phone

Normalization:



Relation : HAVE



3NF :

TABLES

t_id	capacity

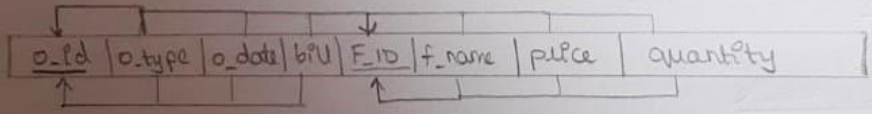
ORDERS

o_id	o_type	o_date	bill

ORDER_HISTORY

t_id	o_id

Relation : CONTAINS



3NF:

ORDERS

o_id	o_type	o_date	bill

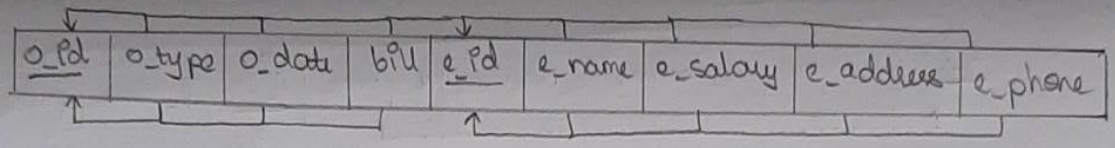
FOODS

f_id	f_name	price

Items

o_id	f_id	quantity

Relation : TAKEN BY



3NF:

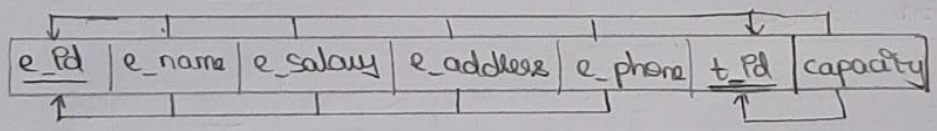
ORDERS

o_Id	o_type	o_date	bill	e_Id

Employees

e_Id	e_name	e_phone	e_address	e_salary

Relation: MAINTAINS



3NF:

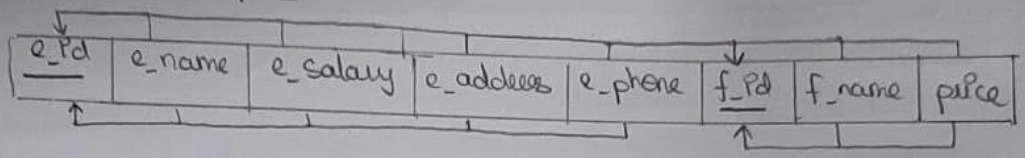
TABLES

t_Id	capacity	e_Id

EMPLOYEES

e_Id	e_name	e_phone	e_address	e_salary

Relation : Prepare



3NF :

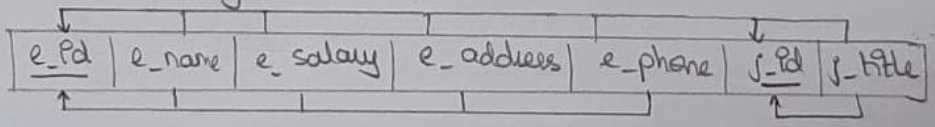
EMPLOYEES

e_Pd	e_name	e_salary	e_address	e_phone

FOODS

f_Pd	f_name	price	e_Pd

Relation : ASSIGN



3NF :

EMPLOYEES

e_Pd	e_name	e_salary	e_address	e_phone	j_Pd

JOBS

j_Pd	j_title

Normalized Tables (up to 3NF)

ITEMS

O_id	F_id	quantity

ORDERS

O_id	O_type	O_date	bill	C_id	E_id

ORDER_HISTORY

T_id	O_id

JOBS

J_id	J_title

EMPLOYEES

E_id	E_name	E_phone	e_address	E_salary	J_id

FOODS

F_id	F_name	price	E_id

TABLES

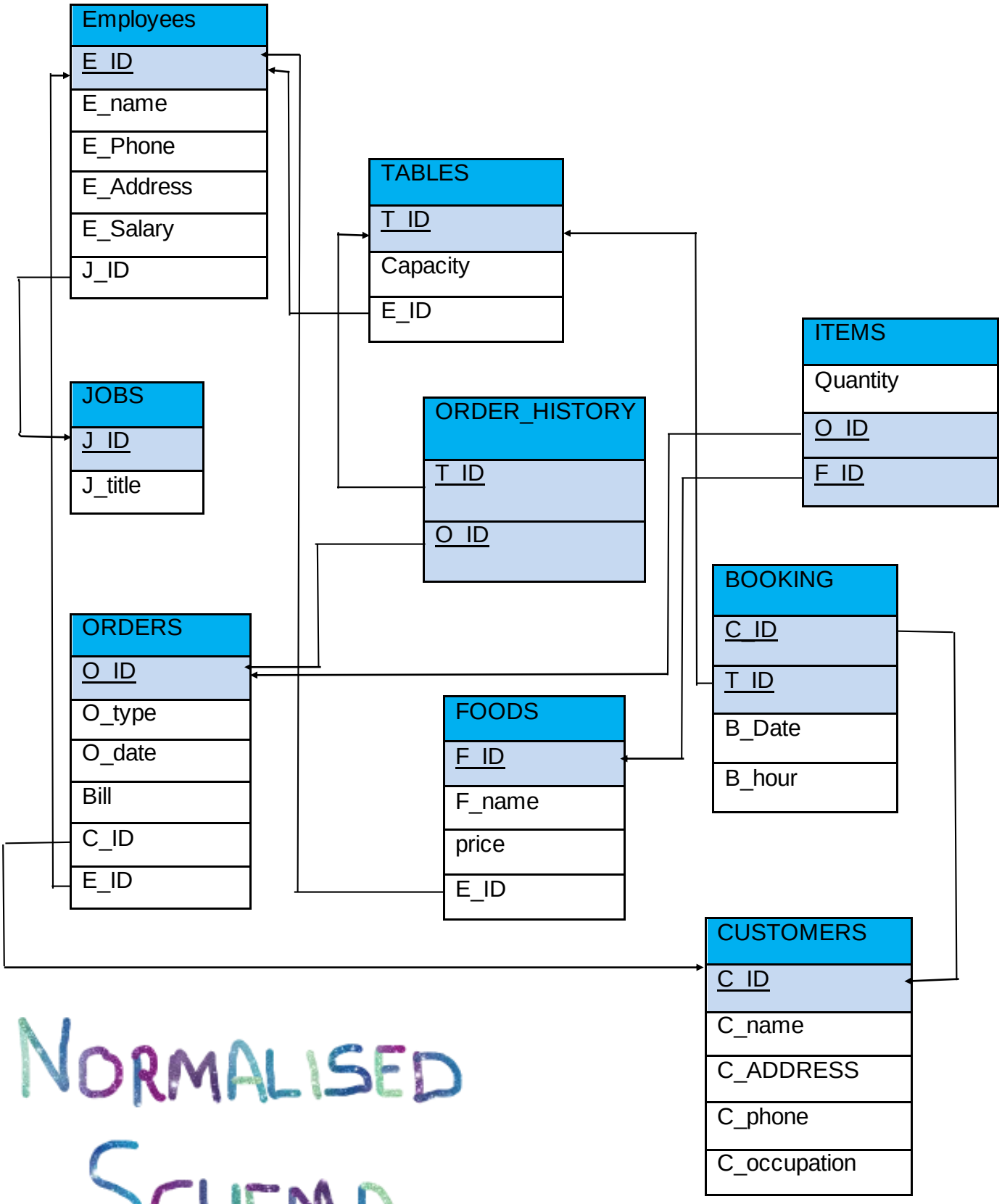
T_id	capacity	E_id

BOOKING

C_id	T_id	B_date	B_hour

CUSTOMERS

C_id	C_name	C_address	C_phone	C_occupation



NORMALISED SCHEMA