

**DATABASE SYSTEM MODELS**

**MINI PROJECT**

**‘PIZZA DELIVERY APP’**

**SUBMITTED BY:**

**ASHWIN GEORGE MATHEW (4NM19IS037)**

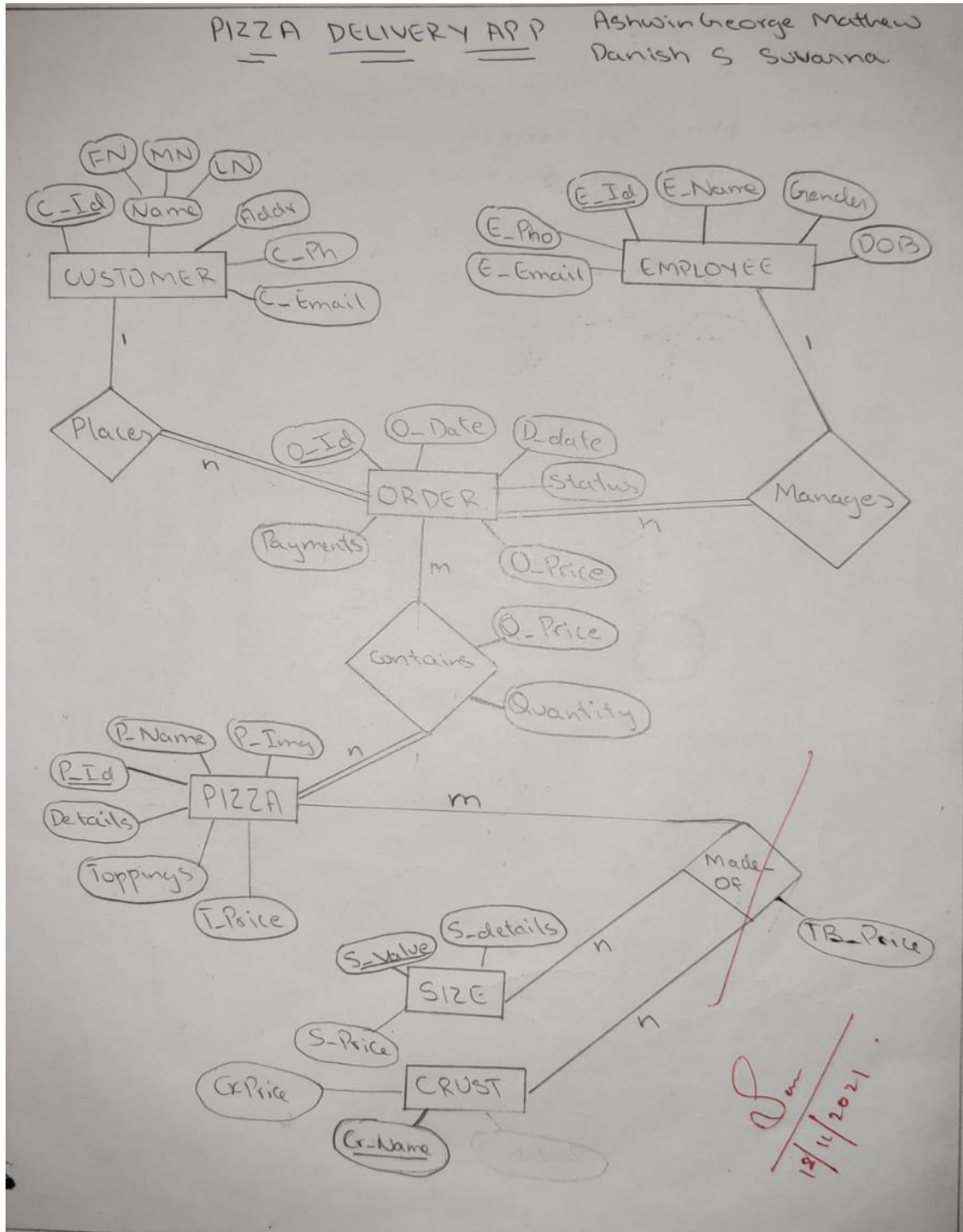
**DHANISH S SUVARNA (4NM19IS050)**

**SUBMITTED TO:**

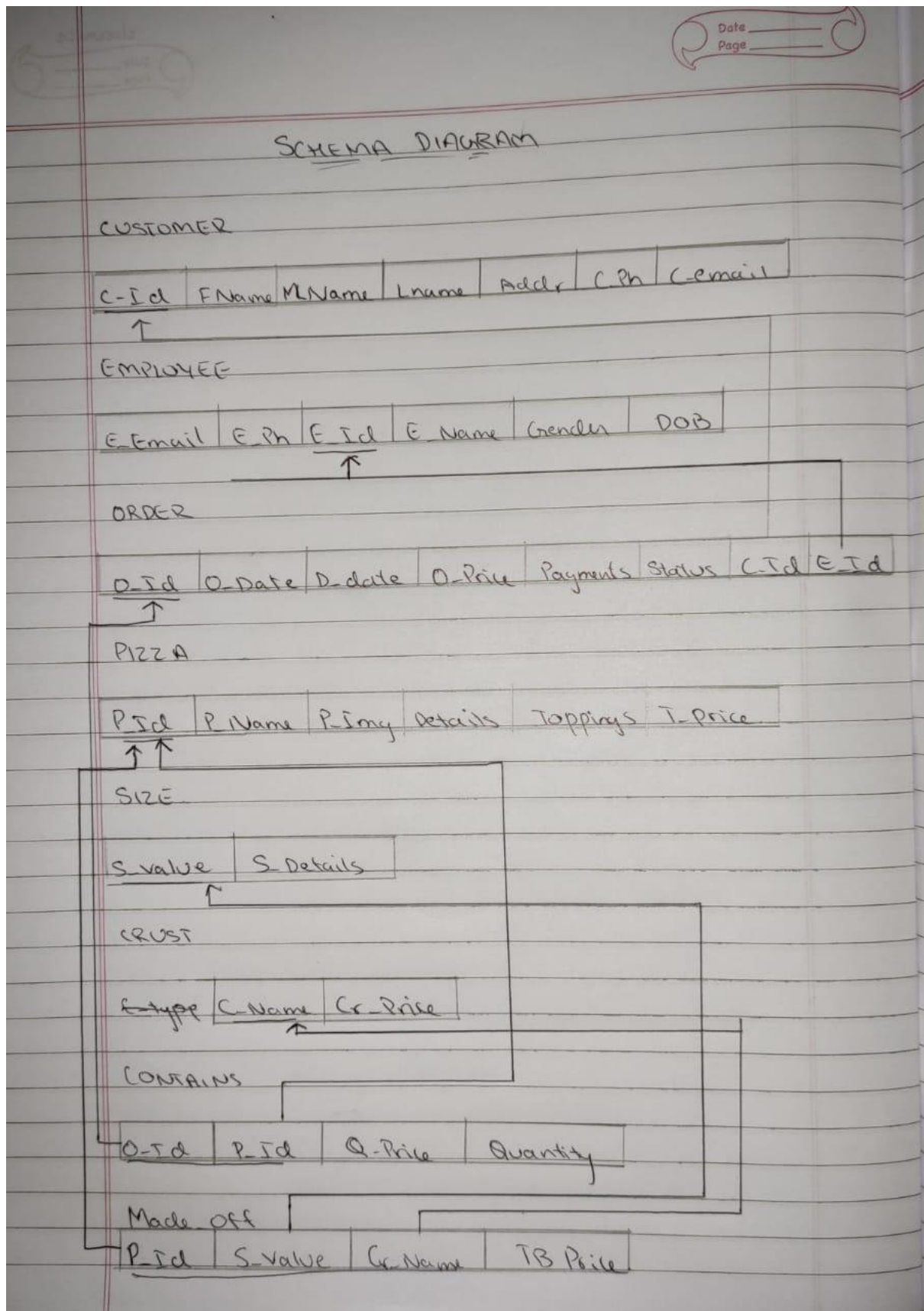
**MRS. SANDHYA S (DEPT. OF ISE)**

# PIZZA DELIVERY DATABASE

## ER DIAGRAM



## SCHEMA DIAGRAM



## **CREATE STATEMENTS:**

```
create database pizza_app
```

```
use pizza_app
```

```
create table CUSTOMER(  
    C_Id int NOT NULL,  
    FName varchar(20) NOT NULL,  
    MName varchar(20),  
    LName varchar(20),  
    Addr varchar(200) NOT NULL,  
    C_Pho varchar(10) NOT NULL,  
    C_mail varchar(50) NOT NULL,  
    Gender char(1),  
    primary key(C_Id),  
    UNIQUE(C_Pho,C_mail)  
)
```

```
create table EMPLOYEE(  
  
    E_Id int NOT NULL,  
    EName varchar(20) NOT NULL,  
    Gender char(1) NOT NULL,  
    DOB Date,  
    E_Pho varchar(10) NOT NULL,  
    E_mail varchar(50) NOT NULL,  
    primary key(E_Id),  
    UNIQUE(E_Pho,E_mail)  
)
```

```

create table ORDERS(
    O_Id int NOT NULL,
    O_date Date NOT NULL,
    D_date Date NOT NULL,
    O_Price float,
    Payment varchar(30) NOT NULL,
    O_Status varchar(20) NOT NULL,
    C_Id int NOT NULL,
    E_Id int NOT NULL,
    primary key(O_Id),
    constraint fk1 foreign key(C_Id) references CUSTOMER(C_Id) ON DELETE CASCADE ON
    UPDATE CASCADE,
    constraint fk2 foreign key(E_Id) references EMPLOYEE(E_Id)ON DELETE CASCADE ON UPDATE
    CASCADE
)

```

```

create table PIZZA(
    P_Id int NOT NULL,
    PName varchar(30) NOT NULL,
    P_Image varchar(50) NOT NULL,
    Details varchar(255),
    Toppings varchar(50) NOT NULL,
    T_price float,
    Tarian varchar(20),
    primary key(P_Id),
    UNIQUE(PName,P_Image)
)

```

```

create table SIZE(
    S_Value varchar(30) NOT NULL,
    S_Details varchar(30) NOT NULL,

```

```
        S_Price float NOT NULL,  
        primary key(S_Value)  
    )
```

```
create table CRUST(  
    Cr_Name varchar(30) NOT NULL,  
    Cr_Price float NOT NULL,  
    primary key(Cr_Name)  
)
```

```
create table CONTAIN(  
    O_Id int NOT NULL,  
    P_Id int NOT NULL,  
    S_Value varchar(30) NOT NULL,  
    Cr_Name varchar(30) NOT NULL,  
    Quantity int NOT NULL,  
    Q_Price float,  
    primary key(O_Id,P_Id),  
    constraint fk3 foreign key(O_Id) references ORDERS(O_Id) ON DELETE CASCADE ON UPDATE  
    CASCADE,  
    constraint fk4 foreign key(P_Id) references PIZZA(P_Id) ON DELETE CASCADE ON UPDATE  
    CASCADE,  
    constraint fk8 foreign key(S_Value) references SIZE(S_Value) ON DELETE CASCADE ON  
    UPDATE CASCADE,  
    constraint fk9 foreign key(Cr_Name) references CRUST(Cr_Name) ON DELETE CASCADE ON  
    UPDATE CASCADE  
)
```

```
create table MADE_OFF(  
    P_Id int NOT NULL,  
    S_Value varchar(30) NOT NULL,
```

```
Cr_Name varchar(30) NOT NULL,  
  
TB_Price float NOT NULL,  
  
primary key(P_Id,S_Value,Cr_Name),  
  
constraint fk5 foreign key(P_Id) references PIZZA(P_Id),  
  
constraint fk6 foreign key(S_Value) references SIZE(S_Value) ON DELETE CASCADE ON  
UPDATE CASCADE,  
  
constraint fk7 foreign key(Cr_Name) references CRUST(Cr_Name) ON DELETE CASCADE ON  
UPDATE CASCADE  
  
)
```

## **INSERT STATEMENTS:**

### **INSERT VALUES INTO CUSTOMER**

```
insert into CUSTOMER values(1,'Suresh','B','Rao','Udupi  
Karnataka','9945556631','sureshbrao@gmail.com','M')
```

```
insert into CUSTOMER values(2,'Ramesh','H','Kaur','Moga  
Punjab','9449678952','rameshkaur18@gmail.com','M')
```

```
insert into CUSTOMER values(3,'Glen','Henson','Fernandes','Kochi  
Kerala','8295778843','glenfernandes789@gmail.com','M')
```

```
insert into CUSTOMER values(4,'Mahesh','D','Shetty','Manglore  
Karnataka','9945662255','maheshshetty1990@gmail.com','M')
```

```
insert into CUSTOMER values(5,'Bhavana','J','Sharma','Mumbai  
Maharashtra','7349804369','bhavanasharma21@gmail.com','F')
```

### **INSERT VALUES INTO EMPLOYEE**

```
insert into EMPLOYEE values(1,'Dhanish S Suvarna','M','2001-03-  
18','8073445263','dhanishssuvarna123@gmail.com')
```

```
insert into EMPLOYEE values(2,'Ashwin Mathew','M','2001-07-  
11','9986977590','ashwinmathew11@gmail.com')
```

```
insert into EMPLOYEE values(3,'Vaishnavi Hegde','F','2001-10-  
04','8976544351','vaishnavihegde21@gmail.com')
```

### INSERT VALUES INTO SIZE

insert into SIZE values('Regular','Serves 1',99)

insert into SIZE values('Medium','Serves 2',199)

insert into SIZE values('Large','Serves 4',299)

### INSERT VALUES INTO CRUST

insert into CRUST values('Cheese Burst',129)

insert into CRUST values('Classic Hand Tossed',149)

insert into CRUST values('Wheat Thin Crust',99)

### INSERT VALUES INTO PIZZA

insert into PIZZA values(701,'Farm House','Farmhouse.jpg',  
'A pizza that goes ballistic on veggies! Check out this mouth watering overload of crunchy,  
crisp capsicum, succulent mushrooms and fresh tomatoes',  
'capsicum, mushrooms, tomatoes',100,'Veg')

insert into PIZZA values(702,'Peppy Paneer','Peppy\_Paneer.jpg',  
'Chunky paneer with crisp capsicum and spicy red pepper - quite a mouthful!',  
'capsicum, paneer',140,'Veg')

insert into PIZZA values(703,'Mexican Green Wave','Mexican\_Green\_Wave.jpg',  
'A pizza loaded with crunchy onions, crisp capsicum, juicy tomatoes and jalapeno with a  
liberal sprinkling of exotic Mexican herbs.',  
'onions, capsicum, tomatoes, jalapeno',150,'Veg')

insert into PIZZA values(704,'Indi Tandoori Paneer','IndianTandooriPaneer.jpg',  
'It is hot. It is spicy. It is oh-so-Indian. Tandoori paneer with capsicum I red paprika I mint  
mayo',  
'paneer, capsicum',120,'Veg')

insert into PIZZA values(705,'Chicken Dominator','Dominator.jpg',  
'Treat your taste buds with Double Pepper Barbecue Chicken, Peri-Peri Chicken, Chicken  
Tikka & Grilled Chicken Rashers',  
'Barbecue Chicken, Peri-Peri Chicken, Chicken Tikka',220,'NonVeg')

insert into PIZZA values(706,'PEPPER BARBECUE & ONION','Pepper\_Barbeque.jpg',  
'Pepper Barbecue Chicken and Onions',  
'Barbecue Chicken,Onions',180,'NonVeg')



```
insert into PIZZA values(707,'Indi Chicken Tikka','IndianChickenTikka.jpg',  
'The wholesome flavour of tandoori masala with Chicken tikka ,onion ,red paprika & mint  
mayo',  
'Chicken Tikka,onion',200,'NonVeg')
```

#### INSERT VALUES INTO ORDERS

```
insert into ORDERS values(101,'2021-11-12','2021-11-13',NULL,'Mobile  
Banking','confirmed',3,2)
```

```
insert into ORDERS values(102,'2021-11-12','2021-11-13',NULL,'Debit Card','confirmed',4,3)
```

```
insert into ORDERS values(103,'2021-11-13','2021-11-14',NULL,'Mobile  
Banking','confirmed',1,2)
```

```
insert into ORDERS values(104,'2021-11-14','2021-11-15',NULL,'COD','cancel',5,1)
```

```
insert into ORDERS values(105,'2021-11-15','2021-11-16',NULL,'Credit Card','confirmed',2,1)
```

```
insert into ORDERS values(106,'2021-11-15','2021-11-16',NULL,'COD','pending',5,1)
```

#### INSERT VALUES INTO CONTAIN

```
insert into CONTAIN values(101,701,'Regular','Wheat Thin Crust',2,NULL)  
insert into CONTAIN values(101,704,'Medium','Classic Hand Tossed',1,NULL)  
insert into CONTAIN values(102,701,'Regular','Wheat Thin Crust',2,NULL)  
insert into CONTAIN values(102,704,'Regular','Classic Hand Tossed',2,NULL)  
insert into CONTAIN values(103,707,'Large','Classic Hand Tossed',1,NULL)  
insert into CONTAIN values(104,705,'Medium','Cheese Burst',3,NULL)  
insert into CONTAIN values(105,703,'Medium','Cheese Burst',2,NULL)  
insert into CONTAIN values(105,705,'Medium','Wheat Thin Crust',1,NULL)  
insert into CONTAIN values(105,701,'Regular','Classic Hand Tossed',3,NULL)  
insert into CONTAIN values(106,703,'Large','Wheat Thin Crust',1,NULL)  
insert into CONTAIN values(106,705,'Large','Wheat Thin Crust',1,NULL)
```

# OUTPUT AND QUERIES

## 1. CUSTOMER

	C_Id	FName	MName	LName	Addr	C_Phno	C_mail	Gender
1	1	Suresh	B	Rao	Udupi Karnataka	9945556631	sureshbrao@gmail.com	M
2	2	Ramesh	H	Kaur	Moga Punjab	9449678952	rameshkaur18@gmail.com	M
3	3	Glen	Henson	Fernandes	Kochi Kerala	8295778843	glenfernandes789@gmail.com	M
4	4	Mahesh	D	Shetty	Manglore Karnataka	9945662255	maheshshetty1990@gmail.com	M
5	5	Bhavana	J	Sharma	Mumbai Maharashtra	7349804369	bhavanasharma21@gmail.com	F

## 2. EMPLOYEE

	E_Id	EName	Gender	DOB	E_Phno	E_mail
1	1	Dhanish S Suvarna	M	2001-03-18	8073445263	dhanishssuvarna123@gmail.com
2	2	Ashwin Mathew	M	2001-07-11	9986977590	ashwinmathew11@gmail.com
3	3	Vaishnavi Hegde	F	2001-10-04	8976544351	vaishnavihedge21@gmail.com

## 3. SIZE

	S_Value	S_Details	S_Price
1	Large	Serves 4	299
2	Medium	Serves 2	199
3	Regular	Serves 1	99

## 4. CRUST

	Cr_Name	Cr_Price
1	Cheese Burst	129
2	Classic Hand Tossed	149
3	Wheat Thin Crust	99

## 5. PIZZA

	P_Id	PName	P_Image	Details	Toppings	T_price	Tarian
1	701	Farm House	Farmhouse.jpg	A pizza that goes ballistic on veggies! Check out t...	capsicum, mushrooms, tomatoes	100	Veg
2	702	Peppy Paneer	Peppy_Paneer.jpg	Chunky paneer with crisp capsicum and spicy red ...	capsicum, paneer	140	Veg
3	703	Mexican Gr...	Mexican_Green...	A pizza loaded with crunchy onions, crisp capsicu...	onions, capsicum, tomatoes, jal...	150	Veg
4	704	Indi Tando...	IndianTandooriP...	It is hot. It is spicy. It is oh-so-Indian. Tandoori pan...	paneer, capsicum	120	Veg
5	705	Chicken Do...	Dominator.jpg	Treat your taste buds with Double Pepper Barbec...	Barbecue Chicken, Peri-Peri Ch...	220	Non...
6	706	PEPPER B...	Pepper_Barbeq...	Pepper Barbecue Chicken and Onions	Barbecue Chicken,Onions	180	Non...
7	707	Indi Chicken...	IndianChickenTi...	The wholesome flavour of tandoori masala with Ch...	Chicken Tikka,onion	200	Non...

## 6. MADE OFF

	P_Id	S_Value	Cr_Name	TB_Price
1	701	Large	Cheese Burst	528
2	701	Large	Classic Hand Tossed	548
3	701	Large	Wheat Thin Crust	498
4	701	Medium	Cheese Burst	428
5	701	Medium	Classic Hand Tossed	448
6	701	Medium	Wheat Thin Crust	398
7	701	Regular	Cheese Burst	328
8	701	Regular	Classic Hand Tossed	348
9	701	Regular	Wheat Thin Crust	298
10	702	Large	Cheese Burst	568
11	702	Large	Classic Hand Tossed	588
12	702	Large	Wheat Thin Crust	538
13	702	Medium	Cheese Burst	468
14	702	Medium	Classic Hand Tossed	488
15	702	Medium	Wheat Thin Crust	438
16	702	Regular	Cheese Burst	368
17	702	Regular	Classic Hand Tossed	388

There are a total of (63+17)tuples.

## 7. CONTAIN

	O_Id	P_Id	S_Value	Cr_Name	Quantity	Q_Price
1	101	701	Regular	Wheat Thin Crust	2	596
2	101	704	Medium	Classic Hand Tossed	1	468
3	102	701	Regular	Wheat Thin Crust	2	596
4	102	704	Regular	Classic Hand Tossed	2	736
5	103	707	Large	Classic Hand Tossed	1	648
6	104	705	Medium	Cheese Burst	3	1644
7	105	701	Regular	Classic Hand Tossed	3	1044
8	105	703	Medium	Cheese Burst	2	956
9	105	705	Medium	Wheat Thin Crust	1	518
10	106	703	Large	Wheat Thin Crust	1	548
11	106	705	Large	Wheat Thin Crust	1	618

## 8. ORDERS

	O_Id	O_date	D_date	O_Price	Payment	O_Status	C_Id	E_Id
1	101	2021-11-12	2021-11-13	1064	Mobile Banking	confirmed	3	1
2	102	2021-11-12	2021-11-13	1332	Debit Card	confirmed	4	3
3	103	2021-11-13	2021-11-14	648	Mobile Banking	confirmed	1	2
4	104	2021-11-14	2021-11-15	1644	COD	cancel	5	1
5	105	2021-11-15	2021-11-16	2518	Credit Card	confirmed	2	1
6	106	2021-11-15	2021-11-16	1166	COD	pending	5	1

## QUERIES

1.Retrieve the Pizza details ordered by customer with FName 'Bhavana'

```
SELECT O.O_Id, P.PName, CN.S_Value, CN.Cr_Name, CN.Quantity, CN.Q_Price
FROM CUSTOMER as C, ORDERS as O, PIZZA as P, CONTAIN as CN
WHERE C.C_Id=O.C_Id and O.O_Id=CN.O_Id and CN.P_Id=P.P_Id and C.FName='Bhavana'
```

## OUTPUT

	O_Id	PName	S_Value	Cr_Name	Quantity	Q_Price
1	104	Chicken Dominator	Medium	Cheese Burst	3	1644
2	106	Mexican Green Wave	Large	Wheat Thin Crust	1	548
3	106	Chicken Dominator	Large	Wheat Thin Crust	1	618

2. Retrieve the Order number, Customer Name, C phoneNo, C Email, Delivery Adds, Delivery Date, Order Price, Payment method of all the orders that need to be delivered By Employee 'Dhanish S Suvarna' only if the Order status is 'confirmed'

```
SELECT O.O_Id, C.FName, C.C_Phno, C.C_mail, C.Addr, O.D_date, O.O_Price, O.Payment
FROM ORDERS as O, EMPLOYEE as E, CUSTOMER as C
WHERE C.C_Id=O.C_Id and O.E_Id=E.E_Id and E.ENAME='Dhanish S Suvarna' and
O.O_Status='confirmed'
```

#### OUTPUT

	O_Id	FName	C_Phno	C_mail	Addr	D_date	O_Price	Payment
1	101	Glen	8295778843	glenfernandes789@gmail.com	Kochi Kerala	2021-11-13	1064	Mobile Banking
2	105	Ramesh	9449678952	rameshkaur18@gmail.com	Moga Punjab	2021-11-16	2518	Credit Card

3. Retrieve the number of people Who Ordered 'Chicken Dominator' Pizza

```
SELECT COUNT(DISTINCT C_Id) as No_Of_People_Ordered_ChickenDominator
FROM ORDERS
WHERE O_Id IN (
    SELECT C.O_Id
    FROM PIZZA as P, CONTAIN as C
    WHERE P.P_Id=C.P_Id and P.PName='Chicken Dominator'
)
```

#### OUTPUT

	No_Of_People_Ordered_ChickenDominator
1	2

4. Retrieve all the Customer who have Ordered Pizzas of Price More Than 1200 and give them 20% Off due to Christmas New year PizzaSale

```
SELECT C.FName, C.MName, C.LName, O.O_Id, O.O_Price as Normal_Price, O.O_Price*0.8
as Discounted_Price
FROM ORDERS as O, CUSTOMER as C
WHERE O.C_Id=C.C_Id and O_Price>1200
```

#### OUTPUT

	FName	MName	LName	O_Id	Normal_Price	Discounted_Price
1	Mahesh	D	Shetty	102	1332	1065.6
2	Bhavana	J	Sharma	104	1644	1315.2
3	Ramesh	H	Kaur	105	2518	2014.4

## TRIGGERS

ALL POSSIBLE COMBINATIONS OF PIZZA ,CRUST AND SIZE

```
create trigger md_of on PIZZA
AFTER INSERT
AS
```

```
DECLARE @T_Price integer
DECLARE @p integer
DECLARE @p1 integer=0
DECLARE @p2 integer=0
DECLARE @p3 integer=0
DECLARE @p4 integer=0
DECLARE @p5 integer=0
DECLARE @p6 integer=0
DECLARE @p7 integer=0
DECLARE @p8 integer=0
DECLARE @p9 integer=0
```

```
SELECT @T_Price=i.T_price FROM inserted i
SELECT @p=i.P_Id FROM inserted i
```

```
SET @p1=99+129+@T_Price
SET @p2=99+149+@T_Price
SET @p3=99+99+@T_Price
SET @p4=199+129+@T_Price
SET @p5=199+149+@T_Price
SET @p6=199+99+@T_Price
SET @p7=299+129+@T_Price
SET @p8=299+149+@T_Price
SET @p9=299+99+@T_Price
```

```
INSERT INTO MADE_OFF values (@p, 'Regular', 'Cheese Burst', @p1)
INSERT INTO MADE_OFF values(@p, 'Regular', 'Classic Hand Tossed', @p2)
INSERT INTO MADE_OFF values(@p, 'Regular', 'Wheat Thin Crust', @p3)
INSERT INTO MADE_OFF values(@p, 'Medium', 'Cheese Burst', @p4)
INSERT INTO MADE_OFF values(@p, 'Medium', 'Classic Hand Tossed', @p5)
INSERT INTO MADE_OFF values(@p, 'Medium', 'Wheat Thin Crust', @p6)
INSERT INTO MADE_OFF values(@p, 'Large', 'Cheese Burst', @p7)
INSERT INTO MADE_OFF values(@p, 'Large', 'Classic Hand Tossed', @p8)
INSERT INTO MADE_OFF values(@p, 'Large', 'Wheat Thin Crust', @p9)
```

GO

## TRIGGER 2

CALCULATES THE PRICE BASED ON QUANTITY AND ALSO FINDS THE TOTAL PRICE BASED ON THE TYPE OF THE PIZZA

```
create trigger cont on CONTAIN
AFTER INSERT
AS
```

```
declare @o INT
declare @p INT
declare @size varchar(30)
declare @crust varchar(30)
declare @q INT
declare @tot FLOAT
declare @op FLOAT
```

```
SELECT @o=i.O_Id FROM inserted i
SELECT @p=i.P_Id FROM inserted i
SELECT @size=i.S_Value FROM inserted i
SELECT @crust=i.Cr_Name FROM inserted i
SELECT @q=i.Quantity FROM inserted i
```

```
SELECT @tot=TB_Price*@q
FROM MADE_OFF
WHERE P_Id=@p and S_Value=@size and Cr_Name=@crust
```

```
UPDATE CONTAIN
SET Q_Price=@tot
WHERE O_Id=@o and P_Id=@p and S_Value=@size and Cr_Name=@crust
```

```
SELECT @op=SUM(Q_Price)
FROM CONTAIN
WHERE O_Id=@o
```

```
UPDATE ORDERS
SET O_Price=@op
WHERE O_Id=@o
```

```
GO
```