

JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY, NOIDA
COMPUTER SCIENCE DEPARTMENT

ONLINE SHOPPING DATABASE SYSTEM



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SUBMITTED TO:

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Project Overview:

This Database system is for a online shop who has various products. The customers can add different products from the shop to the cart and get the order details of the product. The shop owner can get the all details of the customer about the purchase from the database.

Application of the System:

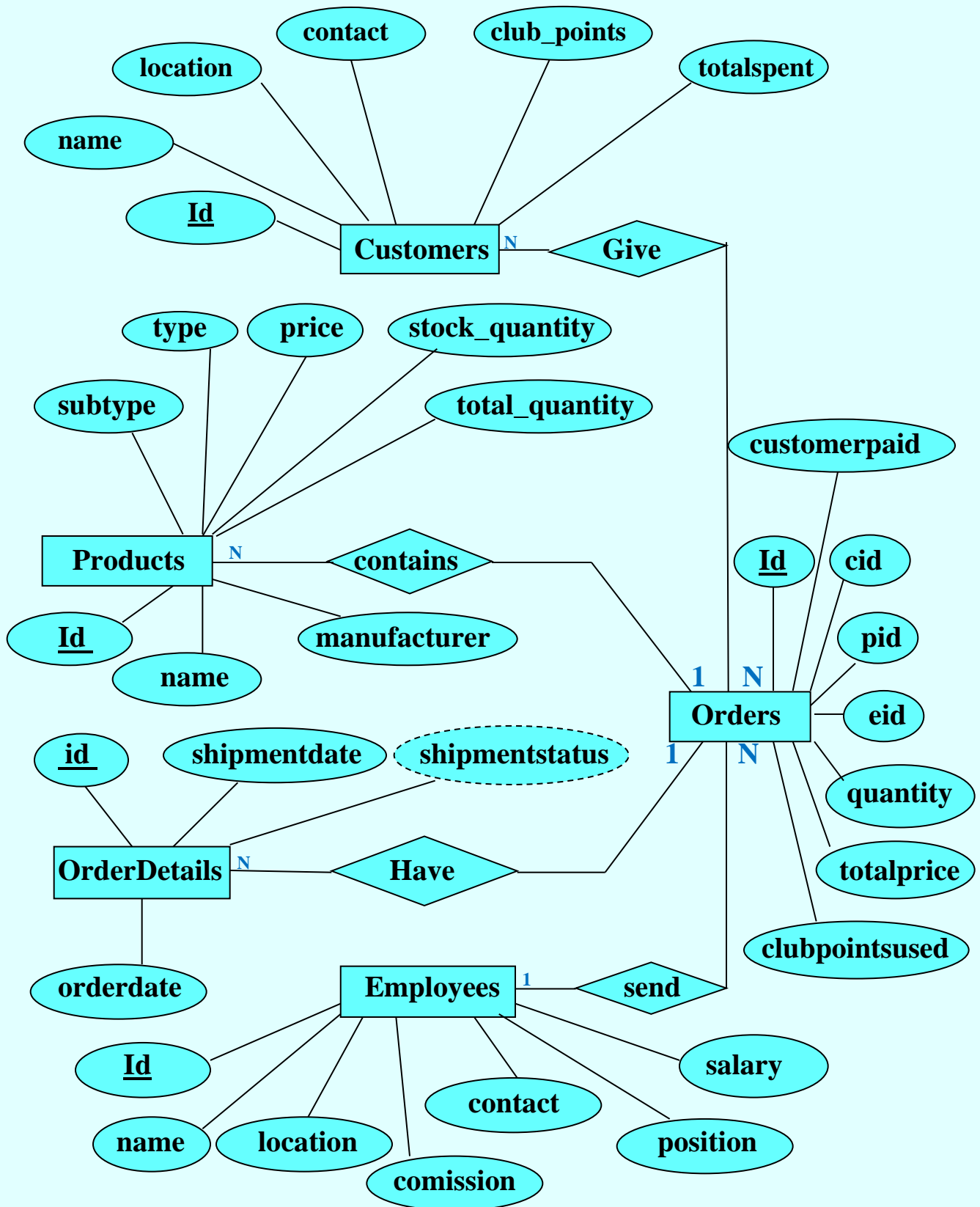
The system contains various procedures, triggers and function to do different types of action in the system like updating stocks, changing prices ,giving membership to the customers. System has functions to find out the number of orders, number of purchases and total amount earned from a particular product. In System queries are used to get the selling percentage of all the products and to know about the orders have not been delivered yet. In this online shopping database system we have used PL/SQL and MySQL.

Database Overview:

The database will contain 6 tables. The tables are:

- **Customers :** contains Id, name, location, contact, club points and total spent. Id is the primary key. Contact must be unique. Club points and total spent will be default to 0.
- **Employees :** contains id, name, location, contact, position, salary and commission. Id is the primary key. Contact must be unique. Salary and commission will be default to 0.
- **Products :** contains id, name, manufacturer, type, subtype, price, stock quantity and total quantity sold so far(from the beginning of company). Id is the primary key. Price and stock_quantity should be greater than 0.
- **Orders :** contains id, customer id, employee id, product id, quantity, total price, clubPointUsed and customerPaid. Id is the primary key. Quantity and total price should be greater than 0.
- **OrderDetails :** contains order id, order date, possible shipping date(automatically three days from order date), shipment status. Order id is both the primary key and foreign key. Order id references from id of Orders table.

ER Diagram of the system:



Creating Tables:-

```
mysql> create database online_shopping_database_system;  
Query OK, 1 row affected (0.08 sec)
```

```
mysql> use online_shopping_database_system;  
Database changed
```

```
mysql> CREATE TABLE Customers  
-> ( id integer  
-> , name VARCHAR(200) NOT NULL  
-> , location VARCHAR(1000) NOT NULL  
-> , contact INTEGER NOT NULL UNIQUE  
-> , clubPoints INTEGER DEFAULT 0  
-> , totalSpent INTEGER DEFAULT 0  
-> , PRIMARY KEY(id));  
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> CREATE TABLE Employees  
-> ( id INTEGER  
-> , name VARCHAR(200)  
-> , location VARCHAR(1000)  
-> , contact VARCHAR(15) NOT NULL UNIQUE  
-> , position VARCHAR(100) NOT NULL  
-> , salary INTEGER DEFAULT 0  
-> , commission INTEGER DEFAULT 0  
-> , PRIMARY KEY(id));  
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> CREATE TABLE Products  
-> ( id INTEGER  
-> , name VARCHAR(200) NOT NULL  
-> , manufacturer VARCHAR(200) NOT NULL  
-> , type VARCHAR(200) NOT NULL  
-> , subtype VARCHAR(200) NOT NULL  
-> , price INTEGER NOT NULL CHECK(price >= 0)  
-> , quantityInStock INTEGER CHECK(quantityInStock >= 0)  
-> , totalQuantitySold INTEGER DEFAULT 0  
-> , PRIMARY KEY(id));  
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> CREATE TABLE Orders
-> ( id INTEGER
-> , cid INTEGER
-> , eid INTEGER
-> , pid INTEGER
-> , quantity INTEGER CHECK(quantity > 0)
-> , clubPointsUsed INTEGER
-> , totalPrice INTEGER CHECK(totalPrice > 0)
-> , customerPaid INTEGER
-> , PRIMARY KEY(id)
-> , FOREIGN KEY(cid) REFERENCES customers(id)
-> , FOREIGN KEY(eid) REFERENCES employees(id)
-> , FOREIGN KEY(pid) REFERENCES products(id));
Query OK, 0 rows affected (0.07 sec)
```

```
mysql> CREATE TABLE OrderDetails
-> ( id INTEGER
-> , orderDate DATE NOT NULL
-> , shipmentDate DATE NOT NULL
-> , shipmentStatus varchar(100) DEFAULT 'PROCESSING'
-> , PRIMARY KEY(id)
-> , FOREIGN KEY(id) REFERENCES orders(id));
Query OK, 0 rows affected (0.03 sec)
```

Inserting data:-

```
mysql> insert into customers values
-> (1,'Rahul_Malik','Sonipat',14778,7,5500),
-> (2,'Amisha_Sharma','Nagpur',14375,3,1500),
-> (3,'Mansi_Joshi','Haldwani',14343,5,3500),
-> (4,'Paras_Garg','Bhopal',14453,4,3000),
-> (5,'Shivam_Goyal','Delhi',14374,6,3500),
-> (6,'Gaurav_Nayak','Rohtak',14574,8,6000),
-> (7,'Sachin_Khatri','Chandigarh',14584,5,3500),
-> (8,'Rahul_Goyal','Kolkata',14564,5,3500),
-> (9,'Tanmay_Sharma','Mumbai',14562,6,3500),
-> (10,'Anshu_Dixit','Dehradun',14561,7,5500),
-> (11,'Sanjeev_Sharma','Lucknow',14550,3,1500),
-> (12,'Abhishek_Dixit','Raipur',14530,4,3000),
-> (13,'Naman_Garg','Jaipur',14599,4,3000),
-> (14,'Himani_Jain','Shimla',14589,1,500),
-> (15,'Akhsay_Jain','Shimla',14580,2,1000);
Query OK, 15 rows affected (0.07 sec)
Records: 15 Duplicates: 0 Warnings: 0
```

```
mysql> insert into employees values
-> (101,'Ayush_Garg','Lucknow','9764538820','Accountant',18000,250),
-> (102,'Piyush_Singh','chandigarh','9263518923','Manager',22000,350),
-> (103,'Arjun_hooda','Delhi','9593919983','Quality_Incharge',20000,300),
-> (104,'Sheetal_Joshi','Delhi','9183818983','Marketing',15000,200),
-> (105,'Reena_Hooda','Rohtak','9585858985','sales_employee',16000,230),
-> (106,'Anshika_Rai','Patna','9475758787','Marketing',15000,200),
-> (107,'Shubam_Garg','Noida','9272728642','sales_employee',16000,230),
-> (108,'Rahul_Jain','Agra','9151329622','sales_employee',16000,230),
-> (109,'Kritika_Agarwal','Sonipat','9050347652','Accountant',18000,250),
-> (110,'Jagbir_Singh','Noida','9255937688','Quality_incharge',20000,300);
Query OK, 10 rows affected (0.03 sec)
Records: 10 Duplicates: 0 Warnings: 0
```

```
mysql> insert into products values
-> (8554,'Pasta','Maggi','food','snack',25,205,19),
-> (8506,'Biscuit','parle_g','food','snack',10,200,50),
-> (8660,'pickel','Mother_pickel','food','snack',55,91,9),
-> (0966,'Almond_oil','Bajaj','Hair_products','oil',50,69,11),
-> (8900,'Lifebouy','Lifebouy','Skin_care','Soap',15,89,24),
-> (8603,'Ponds_facecream','Ponds','Skin_care','Cream',64,59,14),
-> (8658,'Khata_Metha','bikaner','Food','Snack',22,60,24),
-> (8696,'chocochips','Goodday','Food','Snack',25,72,18),
-> (8555,'facewash','Garnier','skin_care','facewash',89,71,22),
-> (8303,'sauce','Heinz','food','snack',92,70,21),
-> (8203,'pan','crystal','Accessories','kitchen_accessories',179,54,16),
-> (8443,'KingFisher_Beer','Kingfisher','food','Liquor',450,66,26),
-> (8432,'Smart_watch','Fastrack','Accessories','Fashion_accessories',1450,66,12),
-> (8922,'Tshirt','jockey','Clothes','mens',550,76,32),
-> (8884,'Garam_Masala','catch','food','spices',55,86,26),
-> (8559,'Dettol','Dettol','Skin_care','soap',20,56,36),
-> (8474,'Saffola-oil','Saffola','food','food_oil',149,62,29),
-> (2665,'Action_shoes','Action','clothes','Shoes',2349,28,2);
Query OK, 18 rows affected (0.03 sec)
Records: 18 Duplicates: 0 Warnings: 0
```

```
mysql> insert into Orders values
-> (201,1,105,2665,1,3,2349,2208),
-> (202,2,108,8203,1,1,179,175),
-> (203,3,107,8559,6,1,60,58),
-> (204,6,105,8443,2,3,900,846),
-> (205,4,107,8303,1,2,92,88),
-> (206,1,108,8922,1,2,550,528),
-> (207,9,108,8555,2,2,178,170),
-> (208,8,105,0966,1,2,50,48),
-> (209,10,107,2665,1,5,2349,2114),
-> (210,11,108,8658,2,3,44,41),
-> (211,13,105,8474,1,2,149,143),
-> (212,15,107,8554,2,2,50,48);
Query OK, 12 rows affected (0.05 sec)
Records: 12 Duplicates: 0 Warnings: 0
```

```
mysql> insert into orderdetails values
-> (201,"2021-01-16","2021-01-20",'Done'),
-> (202,"2021-01-18","2021-01-22",'Done'),
-> (203,"2021-02-01","2021-02-05",'Done'),
-> (204,"2021-02-15","2021-02-19",'Done'),
-> (205,"2021-02-22","2021-02-26",'Done'),
-> (206,"2021-03-15","2021-03-19",'Done'),
-> (207,"2021-04-02","2021-04-06",'Done'),
-> (208,"2021-05-25","2021-05-29",'Done'),
-> (209,"2021-07-01","2021-07-05",'Done'),
-> (210,"2021-07-13","2021-07-17",'Processing'),
-> (211,"2021-07-16","2021-07-20",'Processing'),
-> (212,"2021-07-20","2021-07-24",'Processing');
Query OK, 12 rows affected (0.05 sec)
Records: 12  Duplicates: 0  Warnings: 0
```

Data :-

Table: Customers

```
mysql> select * from customers;
+----+-----+-----+-----+-----+-----+
| id | name       | location | contact | clubPoints | totalSpent |
+----+-----+-----+-----+-----+-----+
| 1  | Rahul_Malik | Sonipat  | 14778   | 7          | 5500       |
| 2  | Amisha_Sharma | Nagpur   | 14375   | 3          | 1500       |
| 3  | Mansi_Joshi  | Haldwani | 14343   | 5          | 3500       |
| 4  | Paras_Garg   | Bhopal   | 14453   | 4          | 3000       |
| 5  | Shivam_Goyal | Delhi    | 14374   | 6          | 3500       |
| 6  | Gaurav_Nayak | Rohtak   | 14574   | 8          | 6000       |
| 7  | Sachin_Khatri | Chandigarh | 14584   | 5          | 3500       |
| 8  | Rahul_Goyal  | Kolkata  | 14564   | 5          | 3500       |
| 9  | Tanmay_Sharma | Mumbai   | 14562   | 6          | 3500       |
| 10 | Anshu_Dixit  | Dehradun | 14561   | 7          | 5500       |
| 11 | Sanjeev_Sharma | Lucknow  | 14550   | 3          | 1500       |
| 12 | Abhishek_Dixit | Raipur   | 14530   | 4          | 3000       |
| 13 | Naman_Garg   | Jaipur   | 14599   | 4          | 3000       |
| 14 | Himani_Jain  | Shimla   | 14589   | 1          | 500        |
| 15 | Akhsay_Jain  | Shimla   | 14580   | 2          | 1000       |
+----+-----+-----+-----+-----+-----+
15 rows in set (0.01 sec)
```

Table: Employees

```
mysql> select * from employees;
+----+-----+-----+-----+-----+-----+-----+
| id | name       | location | contact | position           | salary | commission |
+----+-----+-----+-----+-----+-----+-----+
| 101 | Ayush_Garg | Lucknow  | 9764538820 | Accountant         | 18000  | 250         |
| 102 | Piyush_Singh | chandigarh | 9263518923 | Manager            | 22000  | 350         |
| 103 | Arjun_hooda | Delhi    | 9593919983 | Quality_Incharge   | 20000  | 300         |
| 104 | Sheetal_Joshi | Delhi    | 9183818983 | Marketing           | 15000  | 200         |
| 105 | Reena_Hooda | Rohtak   | 9585858985 | sales_employee      | 16000  | 230         |
| 106 | Anshika_Rai | Patna    | 9475758787 | Marketing           | 15000  | 200         |
| 107 | Shubam_Garg | Noida    | 9272728642 | sales_employee      | 16000  | 230         |
| 108 | Rahul_Jain  | Agra     | 9151329622 | sales_employee      | 16000  | 230         |
| 109 | Kritika_Agarwal | Sonipat | 9050347652 | Accountant         | 18000  | 250         |
| 110 | Jagbir_Singh | Noida    | 9255937688 | Quality_incharge    | 20000  | 300         |
+----+-----+-----+-----+-----+-----+-----+
10 rows in set (0.01 sec)
```


Table: Products

```
mysql> select * from products;
```

id	name	manufacturer	type	subtype	price	quantityInStock	totalQuantitySold
966	Almond_oil	Bajaj	Hair_products	oil	50	69	11
2665	Action_shoes	Action	clothes	Shoes	2349	28	2
8203	pan	crystal	Accessories	kitchen_accessories	179	54	16
8303	sauce	Heinz	food	snack	92	70	21
8432	Smart_watch	Fastrack	Accessories	Fashion_accessories	1450	66	12
8443	KingFisher_Beer	Kingfisher	food	Liquor	450	66	26
8474	Saffola-oil	Saffola	food	food_oil	149	62	29
8506	Biscuit	parle_g	food	snack	10	200	50
8554	Pasta	Maggi	food	snack	25	205	19
8555	facewash	Garnier	skin_care	facewash	89	71	22
8559	Dettol	Dettol	Skin_care	soap	20	56	36
8603	Ponds_facecream	Ponds	Skin_care	Cream	64	59	14
8658	Khata_Metha	bikaner	Food	Snack	22	60	24
8660	pickel	Mother_pickel	food	snack	55	91	9
8696	chocochips	Goodday	Food	Snack	25	72	18
8884	Garam_Masala	catch	food	spices	55	86	26
8900	Lifebouy	Lifebouy	Skin_care	Soap	15	89	24
8922	Tshirt	jockey	Clothes	mens	550	76	32

18 rows in set (0.00 sec)

Table: Orders

```
mysql> select * from orders;
```

id	cid	eid	pid	quantity	clubPointsUsed	totalPrice	customerPaid
201	1	105	2665	1	3	2349	2208
202	2	108	8203	1	1	179	175
203	3	107	8559	6	1	60	58
204	6	105	8443	2	3	900	846
205	4	107	8303	1	2	92	88
206	1	108	8922	1	2	550	528
207	9	108	8555	2	2	178	170
208	8	105	966	1	2	50	48
209	10	107	2665	1	5	2349	2114
210	11	108	8658	2	3	44	41
211	13	105	8474	1	2	149	143
212	15	107	8554	2	2	50	48

12 rows in set (0.00 sec)

Table: Orderdetails

```
mysql> select * from orderdetails;
```

id	orderDate	shipmentDate	shipmentStatus
201	2021-01-16	2021-01-20	Done
202	2021-01-18	2021-01-22	Done
203	2021-02-01	2021-02-05	Done
204	2021-02-15	2021-02-19	Done
205	2021-02-22	2021-02-26	Done
206	2021-03-15	2021-03-19	Done
207	2021-04-02	2021-04-06	Done
208	2021-05-25	2021-05-29	Done
209	2021-07-01	2021-07-05	Done
210	2021-07-13	2021-07-17	Processing
211	2021-07-16	2021-07-20	Processing
212	2021-07-20	2021-07-24	Processing

12 rows in set (0.00 sec)

Queries:-

1. Procedure to find out the membership status on the basis of total money spent by the customers. 'Platinum' given to customer who spent more than 5000 , 'Gold' to customers spent between 2000 to 5000 and 'silver' to rest of the customers.

```
mysql> DELIMITER $$
mysql> CREATE PROCEDURE Membership(
    -> IN ctid integer,
    -> OUT result Varchar(20))
    -> BEGIN
    -> DECLARE spent DECIMAL DEFAULT 0;
    -> SELECT totalspent
    -> INTO spent
    -> FROM customers
    -> WHERE id = ctid;
    -> IF spent > 5000 THEN
    -> SET result = 'PLATINUM';
    -> ELSEIF spent <= 5000 AND spent > 2000 THEN
    -> SET result = 'GOLD';
    -> ELSE
    -> SET result = 'SILVER';
    -> END IF;
    -> END $$
Query OK, 0 rows affected (0.01 sec)
```

Testing:-

```
mysql> Call Membership(1,@result);
    -> select @result;
    -> $$
Query OK, 1 row affected (0.01 sec)

+-----+
| @result |
+-----+
| PLATINUM |
+-----+
1 row in set (0.01 sec)
```

2. Trigger to update the stock when ever a order is placed the quantity in stock and total quantity sold of that product will be updated.

```
mysql> DELIMITER //
mysql>
mysql> CREATE TRIGGER UpdateStock
  -> AFTER INSERT ON orders
  -> FOR EACH ROW
  ->
  -> BEGIN
  ->   UPDATE PRODUCTS
  ->   SET quantityinstock = quantityinstock - 1
  ->   WHERE new.pid = products.id;
  ->   UPDATE PRODUCTS
  ->   SET Totalquantitysold = Totalquantitysold + 1
  ->   WHERE new.pid = products.id;
  -> END;
  ->
  -> //
```

Query OK, 0 rows affected (0.04 sec)

Testing:-

Before insertion:

```
mysql> select * from products;
-> //
```

id	name	manufacturer	type	subtype	price	quantityInStock	totalQuantitySold
966	Almond_oil	Bajaj	Hair_products	oil	50	69	11
2665	Action_shoes	Action	clothes	Shoes	2349	28	2
8203	pan	crystal	Accessories	kitchen_accessories	179	54	16
8303	sauce	Heinz	food	snack	92	70	21
8432	Smart_watch	Fastrack	Accessories	Fashion_accessories	1450	66	12
8443	KingFisher_Beer	Kingfisher	food	Liquor	450	66	26
8474	Saffola-oil	Saffola	food	food_oil	149	62	29
8506	Biscuit	parle_g	food	snack	10	200	50
8554	Pasta	Maggi	food	snack	25	205	19
8555	facewash	Garnier	skin_care	facewash	89	71	22
8559	Dettol	Dettol	Skin_care	Soap	20	56	36
8603	Ponds_facecream	Ponds	Skin_care	Cream	64	59	14
8658	Khata_Metha	bikaner	Food	Snack	22	60	24
8660	pickel	Mother_pickel	food	snack	55	91	9
8696	chocochips	Goodday	Food	Snack	25	72	18
8884	Garam_Masala	catch	food	spices	55	86	26
8900	Lifebouy	Lifebouy	Skin_care	Soap	15	89	24
8922	Tshirt	jockey	Clothes	mens	550	76	32

After insertion:

```
mysql> insert into orders values(213,12,105,8555,2,2,178,170);
-> //
Query OK, 1 row affected (0.01 sec)

mysql> select * from products;
-> //
```

id	name	manufacturer	type	subtype	price	quantityInStock	totalQuantitySold
966	Almond_oil	Bajaj	Hair_products	oil	50	69	11
2665	Action_shoes	Action	clothes	Shoes	2349	28	2
8203	pan	crystal	Accessories	kitchen_accessories	179	54	16
8303	sauce	Heinz	food	snack	92	70	21
8432	Smart_watch	Fastrack	Accessories	Fashion_accessories	1450	66	12
8443	KingFisher_Beer	Kingfisher	food	Liquor	450	66	26
8474	Saffola-oil	Saffola	food	food_oil	149	62	29
8506	Biscuit	parle_g	food	snack	10	200	50
8554	Pasta	Maggi	food	snack	25	205	19
8555	facewash	Garnier	skin_care	facewash	89	70	23
8559	Dettol	Dettol	Skin_care	Soap	20	56	26
8603	Ponds_facecream	Ponds	Skin_care	Cream	64	59	14
8658	Khata_Metha	bikaner	Food	Snack	22	60	24
8660	pickel	Mother_pickel	food	snack	55	91	9
8696	chocohips	Goodday	Food	Snack	25	72	18
8884	Garam_Masala	catch	food	spices	55	86	26
8900	Lifebouy	Lifebouy	Skin_care	Soap	15	89	24
8922	Tshirt	jockey	Clothes	mens	550	76	32

```
18 rows in set (0.00 sec)
```

3. Trigger to update the total amount spent by the customer, each time

When customers give s order the amount paid by the customer will be added.

```
mysql> DELIMITER //
mysql>
mysql> CREATE TRIGGER Udatetotalspent
-> AFTER INSERT ON orders
-> FOR EACH ROW
-> BEGIN
->
->     UPDATE customers
->     SET totalspent = totalspent + new.customerpaid
->     WHERE NEW.Cid = CUSTOMERS.id;
->
-> END;
->
-> //
```

```
Query OK, 0 rows affected (0.06 sec)
```

Testing:-

Before giving order:

```
mysql> select * from customers;
-> //
```

id	name	location	contact	clubPoints	totalSpent
1	Rahul_Malik	Sonipat	14778	7	5500
2	Amisha_Sharma	Nagpur	14375	3	1500
3	Mansi_Joshi	Haldwani	14343	5	3500
4	Paras_Garg	Bhopal	14453	4	3000
5	Shivam_Goyal	Delhi	14374	6	3500
6	Gaurav_Nayak	Rohtak	14574	8	6000
7	Sachin_Khatri	Chandigarh	14584	5	3500
8	Rahul_Goyal	Kolkata	14564	5	3500
9	Tanmay_Sharma	Mumbai	14562	6	3500
10	Anshu_Dixit	Dehradun	14561	7	5500
11	Sanjeev_Sharma	Lucknow	14550	3	1500
12	Abhishek_Dixit	Raipur	14530	4	3000
13	Naman_Garg	Jaipur	14599	4	3000
14	Himani_Jain	Shimla	14589	1	500
15	Akhsay_Jain	Shimla	14580	2	1000

```
15 rows in set (0.01 sec)
```

After giving order:

```
mysql> insert into orders values(214,1,107,8203,1,1,179,175);
-> //
Query OK, 1 row affected (0.03 sec)

mysql> select * from customers;
-> //
```

id	name	location	contact	clubPoints	totalSpent
1	Rahul_Malik	Sonipat	14778	7	5675
2	Amisha_Sharma	Nagpur	14375	3	1500
3	Mansi_Joshi	Haldwani	14343	5	3500
4	Paras_Garg	Bhopal	14453	4	3000
5	Shivam_Goyal	Delhi	14374	6	3500
6	Gaurav_Nayak	Rohtak	14574	8	6000
7	Sachin_Khatri	Chandigarh	14584	5	3500
8	Rahul_Goyal	Kolkata	14564	5	3500
9	Tanmay_Sharma	Mumbai	14562	6	3500
10	Anshu_Dixit	Dehradun	14561	7	5500
11	Sanjeev_Sharma	Lucknow	14550	3	1500
12	Abhishek_Dixit	Raipur	14530	4	3000
13	Naman_Garg	Jaipur	14599	4	3000
14	Himani_Jain	Shimla	14589	1	500
15	Akhsay_Jain	Shimla	14580	2	1000

```
15 rows in set (0.00 sec)
```

4. Function to get the no. of orders in a particular period of time.

```
mysql> delimiter //
mysql> CREATE FUNCTION NOOFORDERS(date1 date,date2 date) returns integer DETERMINISTIC
-> Begin
-> DECLARE RESULT integer ;
-> select count(*) into result from orderdetails where orderdate>=date1 and orderdate< date2;
-> return RESULT;
-> END;
-> //
Query OK, 0 rows affected (0.01 sec)
```

Testing:-

```
mysql> select NOOFORDERS("2021-02-01","2021-03-01") as No_of_orders from orderdetails;
-> //
+-----+
| No_of_orders |
+-----+
|             3 |
```

5. Function to get the amount earned from a particular product.

```
mysql> CREATE FUNCTION totalamount(pd integer) returns integer DETERMINISTIC
-> BEGIN
-> DECLARE RESULT INTEGER DEFAULT 0;
-> select SUM(customerPaid) into RESULT from orders where pid=pd;
-> return RESULT;
-> END;
-> //
Query OK, 0 rows affected (0.04 sec)
```

Testing:-

```
mysql> select totalamount(2665) as Totalearned from orders;
-> //
+-----+
| Totalearned |
+-----+
|          4322 |
```

6. Function to get the number of times a customer has purchased the product.

```
mysql> delimiter //
mysql> CREATE FUNCTION NOOFPURCHASE(ct integer) returns integer DETERMINISTIC
-> BEGIN
-> DECLARE Result INTEGER DEFAULT 0;
-> select count(*) into Result from orders where cid=ct;
-> return Result;
-> END;
-> //
Query OK, 0 rows affected (0.04 sec)
```

Testing:-

```
mysql> select NOOFPURCHASE(1) as no_of_purchases from orders;
-> //
+-----+
| no_of_purchases |
+-----+
|                2 |
```

7. Procedure to change price according to their selling percentage using cursor as if the selling percentage is less than 3% than price will fall by 5, if the selling percentage is higher than 10% than price will rise by 5 and price of all the rest products will rise by 2.

```
mysql> DELIMITER $$
mysql> CREATE PROCEDURE changeprice()
-> BEGIN
-> DECLARE finished integer DEFAULT 0;
-> DECLARE sold integer DEFAULT 0;
-> DECLARE qlft integer DEFAULT 0;
-> DECLARE qtotal integer DEFAULT 0;
-> DECLARE pr DECIMAL DEFAULT 0;
-> DECLARE c CURSOR
-> FOR SELECT totalQuantitySold , quantityInStock FROM products;
-> DECLARE CONTINUE HANDLER
-> FOR NOT FOUND SET finished = 1;
-> OPEN c;
-> Getpr:LOOP
-> FETCH NEXT FROM C INTO sold, qlft;
-> SET qtotal = sold + qlft;
-> SET pr= (sold/qtotal)*100;
-> IF pr<3 THEN
-> UPDATE products SET price = price-5;
-> ELSEIF pr>10 THEN
-> UPDATE products SET price = price +5;
-> ELSE
-> UPDATE products SET price = price+2;
-> END IF;
-> IF finished=1 THEN
-> LEAVE getpr;
-> END IF;
-> END LOOP Getpr;
-> CLOSE c;
-> END $$
Query OK, 0 rows affected (0.01 sec)
```

8. Query to add a column in the products table to find out the selling percentage of all the products.

```
mysql> alter table products add column selling_percentage decimal(5,2);
-> //
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> update products set selling_percentage= (totalquantitysold/(quantityinstock+totalquantitysold))*100;
-> //
Query OK, 18 rows affected, 14 warnings (0.01 sec)
Rows matched: 18 Changed: 18 Warnings: 14
```

Testing:-

```
mysql> select * from products;
-> //
```

id	name	manufacturer	type	subtype	price	quantityInStock	totalQuantitySold	selling_percentage
966	Almond_oil	Bajaj	Hair_products	oil	50	69	11	13.75
2665	Action_shoes	Action	clothes	Shoes	2349	28	2	6.67
8203	pan	crystal	Accessories	kitchen_accessories	179	53	17	24.29
8303	sauce	Heinz	food	snack	92	70	21	23.08
8432	Smart_watch	Fasttrack	Accessories	Fashion_accessories	1450	66	12	15.38
8443	KingFisher_Beer	Kingfisher	food	Liquor	450	66	26	28.26
8474	Saffola-oil	Saffola	food	food_oil	149	62	29	31.87
8506	Biscuit	parle_g	food	snack	10	200	50	20.00
8554	Pasta	Maggi	food	snack	25	205	19	8.48
8555	facewash	Garnier	skin_care	facewash	89	70	23	24.73
8559	Dettol	Dettol	Skin_care	soap	20	56	36	39.13
8603	Ponds_facecream	Ponds	Skin_care	Cream	64	59	14	19.18
8658	Khata_Metha	bikaner	Food	Snack	22	60	24	28.57
8660	pickel	Mother_pickel	food	snack	55	91	9	9.00
8696	chocohips	Goodday	Food	Snack	25	72	18	20.00
8884	Garam_Masala	catch	food	spices	55	86	26	23.21
8900	Lifebouy	Lifebouy	Skin_care	Soap	15	89	24	21.24
8922	Tshirt	jockey	Clothes	mens	550	76	32	29.63

```
18 rows in set (0.00 sec)
```

9. Query to select the names of the employees and customers who live in the same location and can contact the customers to give them update about sale and special offers.

```
mysql> select e.name,c.name
-> from employees e,customers c,orders o
-> where o.eid=e.id and o.cid=c.id
-> and e.location=c.location;
-> //
```

Output:

```
+-----+-----+
| name      | name      |
+-----+-----+
| Reena_Hooda | Gaurav_Nayak |
+-----+-----+
1 row in set (0.01 sec)
```

10. Query to find out the all order details of the orders having payment done but the delivery is in process.

```
mysql> select * from
-> orders o, orderdetails od
-> where o.id=od.id and shipmentstatus='Processing';
-> //
```


Output:

id	cid	eid	pid	quantity	clubPointsUsed	totalPrice	customerPaid	id	orderDate	shipmentDate	shipmentStatus
210	11	108	8658	2	3	44	41	210	2021-07-13	2021-07-17	Processing
211	13	105	8474	1	2	149	143	211	2021-07-16	2021-07-20	Processing
212	15	107	8554	2	2	50	48	212	2021-07-20	2021-07-24	Processing

3 rows in set (0.00 sec)