

## SQL QUERIES: SNAPBUY- 2021266, 2021263

### BASIC SELECTION:--

```
mysql> select * from USR where upper(User_Name) like 'CL%';
```

User_Id	User_Name	Passwr	Street	City	Email_Id	Phone
2166	Clive	XipEFdTF02	673 Nancy Circle	673 Nancy Circle	cbeesley11@symantec.com	384-343-7296
15673	Claudianus	R8c0q9TxM0s	460 Debs Road	460 Debs Road	cohannen19@cnn.com	472-716-6316
90751	Clive	nFQMoGhEPdf	140 Corscot Drive	140 Corscot Drive	cmoquin13@businessweek.com	277-850-8707

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

### NATURAL JOIN:--

```
mysql> select Order_Id, Shipper_Name AS "SHIPPER NAME", Shipper_Address, Shipper_Rating from orde O NATURAL JOIN shipper S WHERE S.Shipper_Rating = 9;
```

Order_Id	SHIPPER NAME	Shipper_Address	Shipper_Rating
5488	Berta	0 Anhalt Park	9
14957	Deanne	5 Annamark Way	9
17832	Gordan	570 Butterfield Terrace	9
33546	Gerri	50 Bowman Avenue	9
51693	Chrisse	0 Mallory Parkway	9
57286	Sullivan	45 Chive Alley	9
66243	Edgar	7 Maple Wood Junction	9
84750	Alexia	0819 Badeau Avenue	9
85527	Josefina	8 Autumn Leaf Way	9
87708	Korey	48215 Hoffman Center	9
7303	Jenny	20614 Butterfield Terrace	9
98977	Carroll	5 Algoma Terrace	9

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

### UPDATE COMMAND:--

```
mysql> UPDATE PRODUCT P SET P.Product_Id = P.Product_Id + 1000 WHERE P.Product_Id = ANY ( SELECT Product_Id from inventory WHERE Quantity > 5 );
```

```
Query OK, 96 rows affected (0.06 sec)
```

```
Rows matched: 96 Changed: 96 Warnings: 0
```

## INNER JOIN:--

```
mysql> select Coupon_Discount, Coupon_Expirydate, Order_Id, Total_Cost from Coupon C INNER JOIN orde O ON C.User_Id = O.User_Id WHERE C.Coupon_Expirydate <= '2-16-2022' AND O.Total_Cost = 90;
```

Coupon_Discount	Coupon_Expirydate	Order_Id	Total_Cost
23	08-05-2022	70984	90
32	10-01-2022	82739	90

2 rows in set (0.00 sec)

## NESTED SELECT QUERY:--

```
mysql> select * from cart where Product_Id in ( SELECT DISTINCT Product_Id from BelongsTo where Category_Id in (SELECT  
-> Category_Id from Category WHERE Category_Name = 'Mras Inc'));
```

Product_Id	User_Id	Quantity	Price
67474	66474	89	9845

1 row in set (0.00 sec)

## NESTED SELECT + AVG FUNCTION:--

```
mysql> SELECT * FROM cart where Product_Id in  
-> ( SELECT Product_Id FROM PRODUCT WHERE Product_Cost <  
-> ( SELECT AVG(Product_Cost) FROM PRODUCT ORDER BY Product_Cost)) limit 10;
```

Product_Id	User_Id	Quantity	Price
2780	1780	81	497
2807	1807	11	4843
3166	2166	51	3767
4316	3316	29	1279
5032	4032	45	7487
5392	4392	93	4147
5488	5488	0	1310
5640	4640	52	2072
6821	5821	6	478
10102	9102	47	1227

10 rows in set (0.00 sec)

## AVG AND SUM IN NESTED SELECT

```
mysql> SELECT SUM(QUANTITY*PRICE) FROM CART WHERE USER_ID IN
-> ( SELECT USER_ID FROM COUPON WHERE COUPON_DISCOUNT >
-> (SELECT AVG(COUPON_DISCOUNT) FROM COUPON));
+-----+
| SUM(QUANTITY*PRICE) |
+-----+
|          11542253   |
+-----+
1 row in set (0.00 sec)
```

## ALTER TABLE COMMAND(BOTH ADD AND DROP COLUMN)

```
mysql> ALTER TABLE BILL
-> ADD COLUMN BILL_INFORMATION TEXT;
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT * FROM BILL LIMIT 10;
+-----+-----+-----+-----+
| Bill_Id | Bill_Address          | Payment_Mode | BILL_INFORMATION |
+-----+-----+-----+-----+
| 1780    | 51109 Arizona Park    | CASH         | NULL             |
| 1807    | 48406 Hoard Park      | CASH         | NULL             |
| 2166    | 24 Meadow Valley Junction | CASH         | NULL             |
| 3316    | 42 Sutteridge Street  | PAYTM        | NULL             |
| 4032    | 061 7th Pass          | PAYTM        | NULL             |
| 4392    | 5 Northview Street    | CASH         | NULL             |
| 4640    | 638 Judy Center       | PAYTM        | NULL             |
| 5488    | 3218 Schurz Avenue    | CASH         | NULL             |
| 5821    | 1 Northland Place     | PAYTM        | NULL             |
| 9102    | 3 Buena Vista Plaza   | CASH         | NULL             |
+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> ALTER TABLE BILL
-> DROP COLUMN BILL_INFORMATION;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT * FROM BILL LIMIT 10;
+-----+-----+-----+
| Bill_Id | Bill_Address          | Payment_Mode |
+-----+-----+-----+
| 1780    | 51109 Arizona Park    | CASH         |
| 1807    | 48406 Hoard Park      | CASH         |
| 2166    | 24 Meadow Valley Junction | CASH         |
| 3316    | 42 Sutteridge Street  | PAYTM        |
| 4032    | 061 7th Pass          | PAYTM        |
| 4392    | 5 Northview Street    | CASH         |
| 4640    | 638 Judy Center       | PAYTM        |
| 5488    | 3218 Schurz Avenue    | CASH         |
| 5821    | 1 Northland Place     | PAYTM        |
| 9102    | 3 Buena Vista Plaza   | CASH         |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

## GROUP BY AND COUNT(\*) CLAUSE:--

```
mysql> SELECT PRODUCT_NAME,COUNT(*) AS "ALL 5 STAR PRODUCTS" FROM PRODUCT WHERE PRODUT_RATING = 5 GROUP BY PRODUCT_NAME;
```

PRODUCT_NAME	ALL 5 STAR PRODUCTS
Avavee	1
Bluezoom	1
Browsezoom	1
Bubblebox	1
Centimia	1
Dabjam	1
Einti	1
Gigaclub	1
Innojam	1
Katz	1
Mydo	1
Realcube	1
Thoughtstorm	1
Topicstorm	1
Trudoo	1
Vipe	1

16 rows in set (0.00 sec)

```
mysql> SELECT PRODUCT_COST,COUNT(*) AS "ALL 5 STAR PRODUCTS" FROM PRODUCT WHERE PRODUT_RATING = 5 GROUP BY PRODUCT_COST ORDER BY PRODUCT_COST DESC;
```

PRODUCT_COST	ALL 5 STAR PRODUCTS
92549	1
87708	1
86586	1
82728	1
70121	1
68245	1
51693	1
51144	1
41323	1
33546	1
28933	1
26819	1
11444	1
9989	1
5488	1
1807	1

16 rows in set (0.00 sec)

## RIGHT JOIN WITH WHERE CLAUSE FOR GETTING FEEDBACK OF PRODUCTS WITH PRICE > 500:--

```
mysql> SELECT * FROM FEEDBACK RIGHT JOIN USR ON FEEDBACK.USER_ID = USR.USER_ID WHERE FEEDBACK_RATING = 4 AND PRODUCT_NAME IN  
-> (SELECT PRODUCT_NAME FROM PRODUCT WHERE PRODUCT_COST > 500);
```

Feedback_Id	User_Id	Product_Name	Feedback_Rating	User_Id	User_Name	Passwrđ	Street	City	Email_Id	Phone
38062	38062	Meevee	4	38062	Horatia	Z4tAyE	5498 Pierstorff Trail	5498 Pierstorff Trail	hjurisch18@seesaa.net	447-270-0029
46797	46797	Pixope	4	46797	Padraig	9ChKUV2S2	453 Bonner Crossing	453 Bonner Crossing	psedgemondy@apple.com	131-276-6745
53630	53630	Podcat	4	53630	Lula	uk1SftKRiA	3901 Scofield Drive	3901 Scofield Drive	lcallam2h@disqus.com	371-290-9017
70093	70093	Babbleset	4	70093	Bernard	oyuSEeYI	3 Holy Cross Street	3 Holy Cross Street	bnicholi@smh.com.au	794-997-5049
99630	99630	Twiyo	4	99630	Karrah	Sffu3y3iZt	773 Ridgeway Hill	773 Ridgeway Hill	kheigold2@bravesites.com	650-854-6084
99730	99730	Oyoba	4	99730	Cooper	aoRqDAnoJw	38 Summit Park	38 Summit Park	clabern14@cornell.edu	126-131-2458

6 rows in set (0.00 sec)

## FOREIGN KEY CONSTRAINT DISPLAYED:--

```
mysql> select * from product limit 1;
+-----+-----+-----+-----+-----+
| Product_Id | Product_Name | Product_Cost | Product_Rating | Availability |
+-----+-----+-----+-----+-----+
| 1780 | Twitterlist | 1780 | 0 | 1 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> select * from user limit 1;
ERROR 1146 (42S02): Table 'snapbuy.user' doesn't exist
mysql> select * from usr limit 1;
+-----+-----+-----+-----+-----+-----+-----+
| User_Id | User_Name | Passwrd | Street | City | Email_Id | Phone |
+-----+-----+-----+-----+-----+-----+-----+
| 1780 | Mord | jRwnLLsioI | 21432 Pankratz Junction | 21432 Pankratz Junction | mtlbey9@privacy.gov.au | 313-707-9773 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> select * from usr limit 2;
+-----+-----+-----+-----+-----+-----+-----+
| User_Id | User_Name | Passwrd | Street | City | Email_Id | Phone |
+-----+-----+-----+-----+-----+-----+-----+
| 1780 | Mord | jRwnLLsioI | 21432 Pankratz Junction | 21432 Pankratz Junction | mtlbey9@privacy.gov.au | 313-707-9773 |
| 1807 | Filberto | mdOIM3UvNA8P | 76237 Veith Junction | 76237 Veith Junction | frungek@pagesperso-orange.fr | 209-424-1179 |
+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> INSERT INTO CART VALUES(1780, 1807, 90, 89);
ERROR 1062 (23000): Duplicate entry '1780' for key 'cart.Product_Id'
mysql> INSERT INTO CART VALUES(156, 1807, 90, 89);
ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails ('snapbuy`.`cart`, CONSTRAINT `cart_ibfk_1` FOREIGN KEY (`Product_Id`) REFERENCES `product` (`Product_Id`) ON DELETE RESTRICT ON UPDATE CASCADE)
```

## BETWEEN CLAUSE:--

```
mysql> SELECT ORDER_ID, TOTAL_COST FROM ORDE WHERE TOTAL_COST BETWEEN 30 AND 40;
+-----+-----+
| ORDER_ID | TOTAL_COST |
+-----+-----+
| 4392 | 40 |
| 14185 | 39 |
| 28933 | 36 |
| 52823 | 37 |
| 53630 | 31 |
| 90751 | 34 |
| 92549 | 37 |
+-----+-----+
7 rows in set (0.00 sec)
```

## ORDER BY AND INNER JOIN FOR PRIME USERS:

```
mysql> SELECT USER_NAME, COUNT(*) AS "PRIME USERS" FROM USR INNER JOIN CART ON USR.USER_ID = CART.USER_ID WHERE CART.PRICE > 8000 GROUP BY USER_NAME ORDER BY USER_NAME;
```

USER_NAME	PRIME USERS
Bink	1
Bradán	1
Brit	1
Clive	1
Dennie	1
Derrek	1
Hazel	1
Humbert	1
Jason	1
Jewel	1
Leda	1
Lonni	1
Moirá	1
Suzann	1

4 rows in set (0.00 sec)

## CONSTRAINTS OF ALL TABLES:

```
mysql> SHOW CREATE TABLE admin;
```

```
| Table | Create Table
```

```
| admin | CREATE TABLE `admin` (  
  `Admin_Id` int unsigned NOT NULL,  
  `UserName` varchar(50) NOT NULL,  
  `Passwrđ` varchar(20) NOT NULL,  
  `Admin_Special_Key` int NOT NULL DEFAULT '0',  
  PRIMARY KEY (`Admin_Id`),  
  UNIQUE KEY `Admin_Id` (`Admin_Id`),  
  KEY `idx_special_key` (`Admin_Special_Key`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
```

```
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE product;
```

```
| Table | Create Table
```

```
| product | CREATE TABLE `product` (  
  `Product_Id` int unsigned NOT NULL,  
  `Product_Name` varchar(50) NOT NULL,  
  `Product_Cost` int unsigned NOT NULL DEFAULT '0',  
  `Produt_Rating` int NOT NULL,  
  `Availability` int NOT NULL DEFAULT '0',  
  PRIMARY KEY (`Product_Id`),  
  UNIQUE KEY `Product_Id` (`Product_Id`),  
  KEY `idx_special_key` (`Product_Name`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
```

```
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE category;
```

```
| Table | Create Table
```

```
| category | CREATE TABLE `category` (  
  `Category_Id` int unsigned NOT NULL,  
  `Category_Name` varchar(50) NOT NULL,  
  `Category_Discount` int unsigned NOT NULL DEFAULT '0',  
  `Category_Information` varchar(50) NOT NULL,  
  PRIMARY KEY (`Category_Id`),  
  UNIQUE KEY `Category_Id` (`Category_Id`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
```

```
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE usr;
```

```
Table | Create Table
```

```
usr | CREATE TABLE `usr` (  
  `User_Id` int unsigned NOT NULL,  
  `User_Name` varchar(50) NOT NULL,  
  `Passwrđ` varchar(50) NOT NULL,  
  `Street` varchar(50) NOT NULL,  
  `City` varchar(50) NOT NULL,  
  `Email_Id` varchar(50) NOT NULL,  
  `Phone` varchar(50) NOT NULL,  
  PRIMARY KEY (`User_Id`),  
  UNIQUE KEY `User_Id` (`User_Id`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |  
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE orde;
```

```
Table | Create Table
```

```
orde | CREATE TABLE `orde` (  
  `Order_Id` int unsigned NOT NULL,  
  `Delivery_Address` varchar(50) NOT NULL,  
  `Shipper_Id` int unsigned NOT NULL,  
  `Total_Cost` int NOT NULL,  
  `Coupon_Id` int unsigned NOT NULL,  
  `Bill_Id` int unsigned NOT NULL,  
  `User_Id` int unsigned NOT NULL,  
  PRIMARY KEY (`Order_Id`),  
  UNIQUE KEY `Order_Id` (`Order_Id`),  
  UNIQUE KEY `Shipper_Id` (`Shipper_Id`),  
  UNIQUE KEY `Coupon_Id` (`Coupon_Id`),  
  UNIQUE KEY `Bill_Id` (`Bill_Id`),  
  UNIQUE KEY `User_Id` (`User_Id`),  
  CONSTRAINT `orde_ibfk_1` FOREIGN KEY (`User_Id`) REFERENCES `usr` (`User_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,  
  CONSTRAINT `orde_ibfk_2` FOREIGN KEY (`Shipper_Id`) REFERENCES `shipper` (`Shipper_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,  
  CONSTRAINT `orde_ibfk_3` FOREIGN KEY (`Coupon_Id`) REFERENCES `coupon` (`Coupon_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,  
  CONSTRAINT `orde_ibfk_4` FOREIGN KEY (`Bill_Id`) REFERENCES `bill` (`Bill_Id`) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |  
1 row in set (0.00 sec)
```



```
mysql> SHOW CREATE TABLE cart;
```

```
+-----+
| Table | Create Table
```

```
+-----+
| cart | CREATE TABLE `cart` (
  `Product_Id` int unsigned NOT NULL,
  `User_Id` int unsigned NOT NULL,
  `Quantity` int NOT NULL DEFAULT '0',
  `Price` int NOT NULL,
  PRIMARY KEY (`Product_Id`,`Quantity`,`Price`),
  UNIQUE KEY `Product_Id` (`Product_Id`),
  UNIQUE KEY `User_Id` (`User_Id`),
  CONSTRAINT `cart_ibfk_1` FOREIGN KEY (`Product_Id`) REFERENCES `product` (`Product_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,
  CONSTRAINT `cart_ibfk_2` FOREIGN KEY (`User_Id`) REFERENCES `usr` (`User_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
```

```
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE coupon;
```

```
+-----+
| Table | Create Table
```

```
+-----+
| coupon | CREATE TABLE `coupon` (
  `Coupon_Id` int unsigned NOT NULL,
  `Coupon_Discount` int unsigned NOT NULL DEFAULT '0',
  `Coupon_Expirydate` varchar(50) NOT NULL,
  `Availability` int unsigned NOT NULL DEFAULT '0',
  `User_Id` int unsigned NOT NULL AUTO_INCREMENT,
  PRIMARY KEY (`Coupon_Id`),
  UNIQUE KEY `Coupon_Id` (`Coupon_Id`),
  KEY `User_Id` (`User_Id`),
  CONSTRAINT `coupon_ibfk_1` FOREIGN KEY (`User_Id`) REFERENCES `usr` (`User_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB AUTO_INCREMENT=99731 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
```

```
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE bill;
```

```
+-----+
| Table | Create Table
```

```
+-----+
| bill | CREATE TABLE `bill` (
  `Bill_Id` int unsigned NOT NULL,
  `Bill_Address` varchar(50) NOT NULL,
  `Payment_Mode` varchar(50) NOT NULL,
  PRIMARY KEY (`Bill_Id`),
  UNIQUE KEY `Bill_Id` (`Bill_Id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
```

```
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE inventory;
+-----+
| Table | Create Table
+-----+
| inventory | CREATE TABLE `inventory` (
  `Product_Id` int unsigned NOT NULL,
  `Quantity` int NOT NULL DEFAULT '0',
  PRIMARY KEY (`Product_Id`),
  UNIQUE KEY `Product_Id` (`Product_Id`),
  CONSTRAINT `inventory_ibfk_1` FOREIGN KEY (`Product_Id`) REFERENCES `product` (`Product_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE distributor;
+-----+
| Table | Create Table
+-----+
| distributor | CREATE TABLE `distributor` (
  `Distributor_Id` int unsigned NOT NULL,
  `Distributor_Name` varchar(50) NOT NULL,
  `Distributor_Address` varchar(50) NOT NULL,
  PRIMARY KEY (`Distributor_Id`),
  UNIQUE KEY `Distributor_Id` (`Distributor_Id`)
ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE belongsTo;
-> ;
+-----+
| Table | Create Table
+-----+
| belongsTo | CREATE TABLE `belongsTo` (
  `Category_Id` int unsigned NOT NULL,
  `Product_Id` int unsigned NOT NULL,
  PRIMARY KEY (`Category_Id`,`Product_Id`),
  UNIQUE KEY `Category_Id` (`Category_Id`),
  UNIQUE KEY `Product_Id` (`Product_Id`),
  CONSTRAINT `belongsTo_ibfk_1` FOREIGN KEY (`Product_Id`) REFERENCES `product` (`Product_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,
  CONSTRAINT `belongsTo_ibfk_2` FOREIGN KEY (`Category_Id`) REFERENCES `category` (`Category_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE gives;
+-----+
| Table | Create Table
+-----+
| gives | CREATE TABLE `gives` (
  `Feedback_Id` int unsigned NOT NULL,
  `User_Id` int unsigned NOT NULL,
  PRIMARY KEY (`Feedback_Id`,`User_Id`),
  UNIQUE KEY `Feedback_Id` (`Feedback_Id`),
  UNIQUE KEY `User_Id` (`User_Id`),
  CONSTRAINT `gives_ibfk_1` FOREIGN KEY (`Feedback_Id`) REFERENCES `feedback` (`Feedback_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,
  CONSTRAINT `gives_ibfk_2` FOREIGN KEY (`User_Id`) REFERENCES `usr` (`User_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE stores;
+-----+
| Table | Create Table
+-----+
| stores | CREATE TABLE `stores` (
  `Product_Id` int unsigned NOT NULL,
  PRIMARY KEY (`Product_Id`),
  UNIQUE KEY `Product_Id` (`Product_Id`),
  CONSTRAINT `stores_ibfk_1` FOREIGN KEY (`Product_Id`) REFERENCES `product` (`Product_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE shipper;
+-----+
| Table | Create Table
+-----+
| shipper | CREATE TABLE `shipper` (
  `Shipper_Id` int unsigned NOT NULL,
  `Shipper_Name` varchar(50) NOT NULL,
  `Shipper_Address` varchar(50) NOT NULL,
  `Shipper_Rating` int NOT NULL,
  PRIMARY KEY (`Shipper_Id`),
  UNIQUE KEY `Shipper_Id` (`Shipper_Id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE PURCHASED;
+-----+-----+
| Table | Create Table |
+-----+-----+
| PURCHASED | CREATE TABLE `purchased` (
  `Product_Id` int unsigned NOT NULL,
  `Order_Id` int unsigned NOT NULL,
  `Quantity` int NOT NULL DEFAULT '0',
  PRIMARY KEY (`Product_Id`),
  UNIQUE KEY `Product_Id` (`Product_Id`),
  UNIQUE KEY `Order_Id` (`Order_Id`),
  CONSTRAINT `purchased_ibfk_1` FOREIGN KEY (`Product_Id`) REFERENCES `product` (`Product_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,
  CONSTRAINT `purchased_ibfk_2` FOREIGN KEY (`Order_Id`) REFERENCES `orde` (`Order_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE supplies;
+-----+-----+
| Table | Create Table |
+-----+-----+
| supplies | CREATE TABLE `supplies` (
  `Distributor_Id` int unsigned NOT NULL,
  `Product_Id` int unsigned NOT NULL,
  PRIMARY KEY (`Distributor_Id`,`Product_Id`),
  UNIQUE KEY `Distributor_Id` (`Distributor_Id`),
  UNIQUE KEY `Product_Id` (`Product_Id`),
  CONSTRAINT `supplies_ibfk_1` FOREIGN KEY (`Distributor_Id`) REFERENCES `distributor` (`Distributor_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,
  CONSTRAINT `supplies_ibfk_2` FOREIGN KEY (`Product_Id`) REFERENCES `product` (`Product_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> SHOW CREATE TABLE deliveredby;
+-----+-----+
| Table | Create Table |
+-----+-----+
| deliveredby | CREATE TABLE `deliveredby` (
  `Shipper_Id` int unsigned NOT NULL,
  `Order_Id` int unsigned NOT NULL,
  PRIMARY KEY (`Shipper_Id`,`Order_Id`),
  UNIQUE KEY `Shipper_Id` (`Shipper_Id`),
  UNIQUE KEY `Order_Id` (`Order_Id`),
  CONSTRAINT `deliveredby_ibfk_1` FOREIGN KEY (`Shipper_Id`) REFERENCES `shipper` (`Shipper_Id`) ON DELETE RESTRICT ON UPDATE CASCADE,
  CONSTRAINT `deliveredby_ibfk_2` FOREIGN KEY (`Order_Id`) REFERENCES `orde` (`Order_Id`) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-----+-----+
1 row in set (0.00 sec)
```

# RELATION SCHEMA

## 1.) ENTITY: ADMIN

RELATION SCHEMA: Admin(Admin\_Id, UserName, Password, Admin\_Special\_key)

## 2.) ENTITY: PRODUCT

RELATION SCHEMA: Product(Product\_Id, Product\_Cost, Product\_Name, Availability, Product\_Rating)

## 3.) ENTITY: CATEGORY

RELATION SCHEMA: Category(Category\_Id, Category\_Name, Category\_Discount, Category\_Information);

## 4.) ENTITY: ORDER

RELATION SCHEMA: Order(Order\_Id, Delivery\_Address, Shipper\_ID, Total\_Cost, User\_ID, Biill\_ID, Coupon\_ID, Shipper\_ID);

### FOREIGN KEYS IDENTIFIED:

1.) COUPON\_ID UNIQUELY IDENTIFIES COUPON ENTITY

2.) SHIPPER\_ID UNIQUELY IDENTIFIES SHIPPER ENTITY

3.) BILL\_ID UNIQUELY IDENTIFIES BILL ENTITY

4.) USER\_ID UNIQUELY IDENTIFIES USER ENTITY

## 5.) ENTITY: SHIPPER

RELATION SCHEMA: Shipper(Shipper\_ID, Shipper\_Current\_Address, Shipper\_Rating, Shipper\_name)

6.)ENTITY: COUPON

RELATION SCHEMA: Coupon(Coupon\_ID, Discount\_percentage, Availability, Expiry\_Date, User\_ID)

FOREIGN KEYS IDENTIFIED:

1.)USER\_ID UNIQUELY IDENTIFIES USER ENTITY

7.)ENTITY: INVENTORY

RELATION SCHEMA: Inventory(Product\_ID, Quantity)

FOREIGN KEYS IDENTIFIED:

1.)PRODUCT\_ID UNIQUELY IDENTIFIES PRODUCT

8.)ENTITY: CART (WEAK ENTITY IDENTIFIED)

RELATION SCHEMA: Cart(User\_ID, Product\_ID, Quantity)

FOREIGN KEYS IDENTIFIED:

1.)USER ID UNIQUELY IDENTIFIES USER ENTITY

2.)PRODUCT ID UNIQUELY IDENTIFIES PRODUCT ENTITY

9.)ENTITY: FEEDBACK( WEAK ENTITY IDENTIFIED)

RELATION SCHEMA: Feedback(Feedback\_ID, User\_ID, Rating, Product Name)

FOREIGN KEYS IDENTIFIED:

1.)USER\_ID UNIQUELY IDENTIFIES USER ENTITY

- 10.) ENTITY: USER (IDENTIFIED MULTI VALUED ATTRIBUTE IN USER NAMELY PHONE NUMBER AND COMPOSITE ATTRIBUTE NAMELY ADDRESS)

RELATION SCHEMA: User(Name, User\_ID, street, city, Email\_ID, Password)

- 11.) MULTIVALUED ATTRIBUTE IN USER: PHONE NUMBER:

RELATION SCHEMA: Phone\_Number(User\_ID, Phone Number)

- 12.) MULTIVALUED ATTRIBUTE IN ORDER: PURCHASED

RELATION SCHEMA: Purchased(Product\_ID, Order\_ID, Quantity)

FOREIGN KEY IDENTIFIED:

ORDER\_ID UNIQUELY IDENTIFIES ORDER ENTITY

PRODUCT\_ID UNIQUELY IDENTIFIES PRODUCT ENTITY

- 13.) RELATIONSHIP : Belong To Between Category and Product

RELATION SCHEMA: BelongsTo(Product\_ID, Category\_ID)

FOREIGN KEY IDENTIFIED:

CATEGORY\_ID UNIQUELY IDENTIFIES CATEGORY ENTITY

PRODUCT\_ID UNIQUELY IDENTIFIES PRODUCT ENTITY

14.) RELATIONSHIP : Stores between Product and Inventory

RELATION SCHEMA: Stores(Product ID)

FOREIGN KEY IDENTIFIED:

PRODUCT\_ID UNIQUELY IDENTIFIES PRODUCT ENTITY

15.) RELATIONSHIP : DeliveredBy between Order and Shipper

RELATION SCHEMA: DeliveredBy(Order ID, Shipper ID)

FOREIGN KEY IDENTIFIED:

ORDER\_ID UNIQUELY IDENTIFIES ORDER ENTITY

SHIPPER\_ID UNIQUELY IDENTIFIES SHIPPER ENTITY

16.) RELATIONSHIP: Supplies between Distributor and Product

RELATION SCHEMA: Supplies(Distributor ID, Product ID)

FOREIGN KEY IDENTIFIED:

DISTRIBUTOR\_ID UNIQUELY IDENTIFIES DISTRIBUTOR ENTITY

PRODUCT\_ID UNIQUELY IDENTIFIES PRODUCT ENTITY



17.) RELATIONSHIP: Gives between User and Feedback

RELATION SCHEMA: Gives(Feedback ID, User ID)

FOREIGN KEY IDENTIFIED:

FEEDBACK\_ID UNIQUELY IDENTIFIES FEEDBACK ENTITY

USER\_ID UNIQUELY IDENTIFIES USER ENTITY

18.) RELATIONSHIP: ConsistsOf between product and order

RELATION SCHEMA: ConsistsOf(Order ID, Product ID)

FOREIGN KEY IDENTIFIED:

ORDER\_ID UNIQUELY IDENTIFIES ORDER ENTITY

PRODUCT\_ID UNIQUELY IDENTIFIES PRODUCT ENTITY

19.) ENTITY: DISTRIBUTOR

RELATIONSHIP SCHEMA: Distributor(Distributor ID, Name, Address)

20.) MULTIVALUED ATTRIBUTE PHONE NUMBER IN DISTRIBUTOR:

RELATION SCHEMA: Phone\_Number(Distributor ID, Phone Number)

# RELATION SCHEMA GENERATED

## THROUGH SQL

