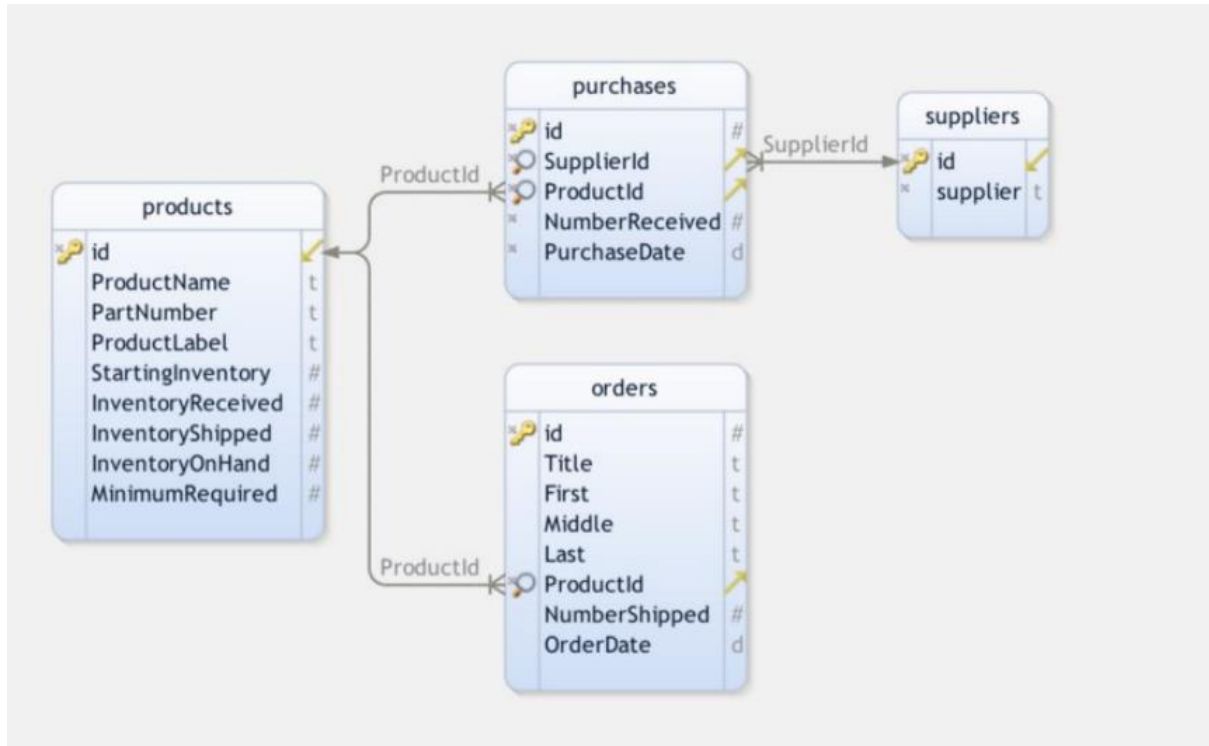


PROJECT ON MYSQL



The aim of this project is to create an inventory system, refer to the diagram above to create data base.

The diagram shows the number of tables along with the relationship between tables.

We need to create the system with tables along with their relationship. We are also required to put dummy data inside the table to get some insights.

Here, we will provide all query's & screenshot of tables and records.

INVENTORY__SYSTEM

1) Query to Create a Database for storing all Above Tables:

```
1  CREATE DATABASE INVENTORY__SYSTEM;  
2  
3 • SHOW DATABASES;  
4  
5 • USE INVENTORY__SYSTEM;
```

```
mysql> CREATE DATABASE INVENTORY__SYSTEM;  
Query OK, 1 row affected (0.01 sec)  
  
mysql> SHOW DATABASES;  
+-----+  
| Database |  
+-----+  
| b_info   |  
| employee_info |  
| information_schema |  
| inventory__system |  
| inventory_system |  
| maaz     |  
| mysql    |  
| new_schema |  
| performance_schema |  
| practice |  
| recon    |  
| sakila   |  
| sys      |  
| todo table |  
| world    |  
+-----+  
15 rows in set (0.00 sec)  
  
mysql> USE INVENTORY__SYSTEM;  
Database changed  
mysql> _
```

1) Query to Create Suppliers Table :

```
4 • CREATE TABLE SUPPLIERS(  
5     SUPPLIER_ID INT NOT NULL,  
6     SUPPLIER_NAME VARCHAR(225),  
7     PRIMARY KEY(SUPPLIER_ID)  
8 );
```

2) Screen Shot of Desc Suppliers Table :

```
mysql> DESC SUPPLIERS;  
+-----+-----+-----+-----+-----+-----+  
| Field          | Type          | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| SUPPLIER_ID    | int           | NO   | PRI | NULL    |       |  
| SUPPLIER_NAME  | varchar(225)  | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
2 rows in set (0.00 sec)
```

3) Query to Insert Records in Suppliers Table :

```
43 • INSERT INTO SUPPLIERS (SUPPLIER_ID,SUPPLIER_NAME)  
44 VALUES  
45 (01,'Alpha Seller'),(02,'Cloud Tail'),  
46 (03,'Acme Tech'),(04,'CDW'),  
47 (05,'ShockWave Tech'),(06,'Dell BV'),  
48 (07,'AT&T Inc'),(08,'Oracle');
```

4) Screen Shot of Suppliers Table with records :

```
mysql> select * from suppliers;  
+-----+-----+  
| SUPPLIER_ID | SUPPLIER_NAME |  
+-----+-----+  
| 1 | Alpha Seller |  
| 2 | Cloud Tail |  
| 3 | Acme Tech |  
| 4 | CDW |  
| 5 | ShockWave Tech |  
| 6 | Dell BV |  
| 7 | AT&T Inc |  
| 8 | Oracle |  
+-----+-----+  
8 rows in set (0.00 sec)
```

1) Query to Create Purchases Table :

```
21 • CREATE TABLE PURCHASES(  
22     PURCHASE_ID INT NOT NULL,  
23     SUPPLIER_ID INT NOT NULL,  
24     PRODUCT_ID INT NOT NULL,  
25     NUMBER_RECEIVED INT NOT NULL,  
26     PURCHASE_DATE VARCHAR(225),  
27     PRIMARY KEY(PURCHASE_ID),  
28     FOREIGN KEY(SUPPLIER_ID) REFERENCES SUPPLIERS(SUPPLIER_ID),  
29     FOREIGN KEY(PRODUCT_ID) REFERENCES PRODUCTS(PRODUCT_ID)  
30 );
```

2) Screen Shot of Desc Purchases Table :

```
mysql> DESC PURCHASES;
```

Field	Type	Null	Key	Default	Extra
PURCHASE_ID	int	NO	PRI	NULL	
SUPPLIER_ID	int	NO	MUL	NULL	
PRODUCT_ID	int	NO	MUL	NULL	
NUMBER_RECEIVED	int	NO		NULL	
PURCHASE_DATE	varchar(225)	YES		NULL	

5 rows in set (0.00 sec)

3) Query to Insert Records in Purchases Table :

```
81 • INSERT INTO PURCHASES (PURCHASE_ID,SUPPLIER_ID,PRODUCT_ID,NUMBER_RECEIVED,PURCHASE_DATE)
82 VALUES
83 (101,8,1021,15,'2003-12-06'),(102,2,1009,20,'2004-02-24'),(103,5,1024,77,'2005-04-25'),
84 (104,1,1030,61,'2017-03-10'),(105,3,1015,42,'2009-07-14'),(106,6,1014,18,'2010-06-08'),
85 (107,7,1011,72,'2015-10-07'),(108,4,1029,66,'2020-11-02'),(109,6,1022,87,'2016-01-01'),
86 (110,8,1013,19,'2012-10-28'),(111,4,1003,5,'2006-02-17'),(112,7,1002,81,'2016-01-23'),
87 (113,5,1008,76,'2022-06-26'),(114,3,1020,84,'2002-12-15'),(115,2,1012,93,'2014-09-18'),
88 (116,1,1005,105,'2018-07-13'),(117,2,1019,101,'2011-11-11'),(118,8,1001,94,'2019-03-29'),
89 (119,4,1002,59,'2008-05-09'),(120,5,1007,31,'2021-08-19'),(121,7,1026,120,'2001-04-22'),
90 (122,6,1027,37,'2007-06-05'),(123,3,1023,102,'2022-02-20'),(124,1,1016,132,'2009-04-04'),
91 (125,4,1017,120,'2010-07-21'),(126,7,1010,95,'2016-12-16'),(127,6,1004,104,'2003-11-12'),
92 (128,2,1018,43,'2001-09-03'),(129,5,1006,10,'2014-05-27'),(130,8,1025,145,'2018-10-02');
```

4) Screen Shot of Purchases Table with Records :

```
mysql> select * from purchases;
```

PURCHASE_ID	SUPPLIER_ID	PRODUCT_ID	NUMBER_RECEIVED	PURCHASE_DATE
101	8	1021	15	2003-12-06
102	2	1009	20	2004-02-24
103	5	1024	77	2005-04-25
104	1	1030	61	2017-03-10
105	3	1015	42	2009-07-14
106	6	1014	18	2010-06-08
107	7	1011	72	2015-10-07
108	4	1029	66	2020-11-02
109	6	1022	87	2016-01-01
110	8	1013	19	2012-10-28
111	4	1003	5	2006-02-17
112	7	1002	81	2016-01-23
113	5	1008	76	2022-06-26
114	3	1020	84	2002-12-15
115	2	1012	93	2014-09-18
116	1	1005	105	2018-07-13
117	2	1019	101	2011-11-11
118	8	1001	94	2019-03-29
119	4	1002	59	2008-05-09
120	5	1007	31	2021-08-19
121	7	1026	120	2001-04-22
122	6	1027	37	2007-06-05
123	3	1023	102	2022-02-20
124	1	1016	132	2009-04-04
125	4	1017	120	2010-07-21
126	7	1010	95	2016-12-16
127	6	1004	104	2003-11-12
128	2	1018	43	2001-09-03
129	5	1006	10	2014-05-27
130	8	1025	145	2018-10-02

30 rows in set (0.00 sec)

1) Query to Create Products Table :

```
9 • CREATE TABLE PRODUCTS(  
10     PRODUCT_ID INT NOT NULL,  
11     PRODUCT_NAME VARCHAR(225),  
12     PART_NUMBER VARCHAR(225),  
13     PRODUCT_LABEL VARCHAR(225),  
14     STARTING_INVENTORY VARCHAR(225),  
15     INVENTORY_RECEIVED INT,  
16     INVENTORY_SHIPPED INT,  
17     INVENTORY_ON_HAND VARCHAR(225),  
18     MINIMUM_REQUIRED INT,  
19     PRIMARY KEY(PRODUCT_ID)  
20 );
```

2) Screen Shot of Desc Products Table :

```
mysql> DESC PRODUCTS;  
+-----+-----+-----+-----+-----+-----+  
| Field          | Type          | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| PRODUCT_ID     | int           | NO   | PRI | NULL    |       |  
| PRODUCT_NAME   | varchar(225)  | YES  |     | NULL    |       |  
| PART_NUMBER    | varchar(225)  | YES  |     | NULL    |       |  
| PRODUCT_LABEL  | varchar(225)  | YES  |     | NULL    |       |  
| STARTING_INVENTORY | varchar(225) | YES  |     | NULL    |       |  
| INVENTORY_RECEIVED | int          | YES  |     | NULL    |       |  
| INVENTORY_SHIPPED | int          | YES  |     | NULL    |       |  
| INVENTORY_ON_HAND | varchar(225)  | YES  |     | NULL    |       |  
| MINIMUM_REQUIRED | int          | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
9 rows in set (0.00 sec)
```

3) Query to Insert Records in Products Table :

```
49 • INSERT INTO PRODUCTS (PRODUCT_ID,PRODUCT_NAME,PART_NUMBER,PRODUCT_LABEL,STARTING_INVENTORY,INVENTORY_RECEIVED,INVENTORY_SHIPPED,INVENTORY_ON_HAND,MINIMUM_REQUIRED)
50 VALUES
51 (1001,'Dell Server','XP 2000','Dell Server-XP 2000','100,007',35,25,'100,017',15),
52 (1002,'Google ChromeBooks','1','Google Chromebooks-1.0','100',75,654,'-479',20),
53 (1003,'Cisco Router','10X','Cisco Router-10X','45',143,76,'86',88),
54 (1004,'Sadasd','21','Sadasd-21','25',0,0,'25',10),
55 (1005,'Semih','37','Semih-37','1',12,5,'8',5),
56 (1006,'Wipro','22','Wipro-22','32',256,10,'85',20),
57 (1007,'Cognizant It','WP 2001','Cognizant-WP 3000','210',65,350,'-550',28),
58 (1008,'TATA Consultant','MWP 24','TATA Consultant-MWP 2.05','28',670,50,'398',5),
59 (1009,'MicroSoft Technology','AWS 2.50','MicroSoft Technology-AWS 6000','3',95,957,'65',35),
60 (1010,'It Vedant','85','It Vedant-85','8',256,07,'-125',9),
61 (1011,'It Departement','2','It Departement-2','20',97,170,'65',16),
62 (1012,'Aditya Birla Group','AWP 1000','Aditya Birla Group-AWS 1000','250,700',258,957,'678',82),
63 (1013,'IBM Techno','CMD 2.50','IBM Techno-CMD 2.50','3',258,33,'297',250),
64 (1014,'Au Small Finance','AUS 35.2','Au Small Finance-AUS 35.2','35',35,135,'13.56',980),
65 (1015,'Axis Bank','125-AXS','Axis Bank 125-AXS','03',330,957,'65',35),
66 (1016,'Future It Company','123','Future It Company 123','102',65,350,'-368',28),
67 (1017,'Bajaj It Finance','FT-320','Bajaj It Finance FT-320','330',651,89,'1002',230),
68 (1018,'All Native Designs','3502','All Native Designs 3502','25',615,980,'678',38),
69 (1019,'Cards Crafty','35-CC','Cards Crafty 35-CC','989',250,68,'6548',230),
70 (1020,'Code That Speaks','CTS 2587','Code That Speaks-CTS 2587','232,52',890,32,'-56',355),
71 (1021,'BNL Programmers','BP-320','BNL Programmers BP-320','35',516,98,'356',96),
72 (1022,'Bridger Data Solutions','BDS-290','Bridger Data Solutions BDS-290','65',87,21,'13',9),
73 (1023,'Code Red Technology','CRT-98','Code Red Technology CRT-98','303',361,250,'6589',320),
74 (1024,'Software Island','6598','Software Island 6598','26',34,608,'-6931',25),
75 (1025,'Cool Source Code','CSC-390','Cool Source Code CSC-390','35',254,18,'56',205),
76 (1026,'Cryptical Coders','CO-5687','Cryptical Coders CO-5687','105',98,188,'560',20),
77 (1027,'Cryptware Tech International','CTI-305','Cryptware Tech International CTI-305','3',2,25,'352',8),
78 (1028,'ICT Systems','ICT-7854','ICT Systems ICT-7854','09',989,18,'1250',95),
79 (1029,'Soften Software House','SSH-12','Soften Software House SSH-12','1050',989,850,'356',105),
80 (1030,'Genetech Solutions','GS-540','Genetech Solutions GS-450','32',660,80,'5601',56);
```

4) Screen Shot of Products Table with Records :

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

PRODUCT_ID	PRODUCT_NAME	PART_NUMBER	PRODUCT_LABEL	STARTING_INVENTORY	INVENTORY_RECEIVED	INVENTORY_SHIPPED	INVENTORY_ON_HAND	MINIMUM_REQUIRED
1001	Dell Server	XP 2000	Dell Server-XP 2000	100,007	35	25	100,017	15
1002	Google ChromeBooks	1	Google Chromebooks-1.0	100	75	654	-479	20
1003	Cisco Router	10X	Cisco Router-10X	45	143	76	86	88
1004	Sadasd	21	Sadasd-21	25	0	0	25	10
1005	Semih	37	Semih-37	1	12	5	8	5
1006	Wipro	22	Wipro-22	32	256	10	85	20
1007	Cognizant It	WP 2001	Cognizant-WP 3000	210	65	350	-550	28
1008	TATA Consultant	MWP 24	TATA Consultant-MWP 2.05	28	670	50	398	5
1009	MicroSoft Technology	AWS 2.50	MicroSoft Technology-AWS 6000	3	95	957	65	35
1010	It Vedant	85	It Vedant-85	8	256	7	-125	9
1011	It Departement	2	It Departement-2	20	97	170	65	16
1012	Aditya Birla Group	AWP 1000	Aditya Birla Group-AWS 1000	250,700	258	957	678	82
1013	IBM Techno	CMD 2.50	IBM Techno-CMD 2.50	3	258	33	297	250
1014	Au Small Finance	AUS 35.2	Au Small Finance-AUS 35.2	35	35	135	13.56	980
1015	Axis Bank	125-AXS	Axis Bank 125-AXS	03	330	957	65	35
1016	Future It Company	123	Future It Company 123	102	65	350	-368	28
1017	Bajaj It Finance	FT-320	Bajaj It Finance FT-320	330	651	89	1002	230
1018	All Native Designs	3502	All Native Designs 3502	25	615	980	678	38
1019	Cards Crafty	35-CC	Cards Crafty 35-CC	989	250	68	6548	230
1020	Code That Speaks	CTS 2587	Code That Speaks-CTS 2587	232,52	890	32	-56	355
1021	BNL Programmers	BP-320	BNL Programmers BP-320	35	516	98	356	96
1022	Bridger Data Solutions	BDS-290	Bridger Data Solutions BDS-290	65	87	21	13	9
1023	Code Red Technology	CRT-98	Code Red Technology CRT-98	303	361	250	6589	320
1024	Software Island	6598	Software Island 6598	26	34	608	-6931	25
1025	Cool Source Code	CSC-390	Cool Source Code CSC-390	35	254	18	56	205
1026	Cryptical Coders	CO-5687	Cryptical Coders CO-5687	105	98	188	560	20
1027	Cryptware Tech International	CTI-305	Cryptware Tech International CTI-305	3	2	25	352	8
1028	ICT Systems	ICT-7854	ICT Systems ICT-7854	09	989	18	1250	95
1029	Soften Software House	SSH-12	Soften Software House SSH-12	1050	989	850	356	105
1030	Genetech Solutions	GS-540	Genetech Solutions GS-450	32	660	80	5601	56

30 rows in set (0.00 sec)

1) Query to Create Orders Table :

```
31 • ○ CREATE TABLE ORDERS(  
32     ORDER_ID INT NOT NULL,  
33     TITLE VARCHAR(225),  
34     FIRST VARCHAR(225),  
35     MIDDLE VARCHAR(225),  
36     LAST VARCHAR(225),  
37     PRODUCT_ID INT NOT NULL,  
38     NUMBER_SHIPPED INT NOT NULL,  
39     ORDER_DATE VARCHAR(225),  
40     PRIMARY KEY(ORDER_ID),  
41     FOREIGN KEY(PRODUCT_ID) REFERENCES PRODUCTS(PRODUCT_ID)  
42 );
```

2) Screen Shot of Desc Orders Table :

```
mysql> DESC ORDERS;
```

Field	Type	Null	Key	Default	Extra
ORDER_ID	int	NO	PRI	NULL	
TITLE	varchar(225)	YES		NULL	
FIRST	varchar(225)	YES		NULL	
MIDDLE	varchar(225)	YES		NULL	
LAST	varchar(225)	YES		NULL	
PRODUCT_ID	int	NO	MUL	NULL	
NUMBER_SHIPPED	int	NO		NULL	
ORDER_DATE	varchar(225)	YES		NULL	

8 rows in set (0.00 sec)

3) Query to Insert Records in Orders Table

```
93 • INSERT INTO ORDERS (ORDER_ID,TITLE,FIRST,MIDDLE,LAST,PRODUCT_ID,NUMBER_SHIPPED,ORDER_DATE) VALUES
94 (201,'cbigley0','Inez','Abad','Heath',1008,145,'2018-10-02'),
95 (202,'adanilov1','Vivia','Voice','Wayne',1019,104,'2003-11-12'),
96 (203,'glongland2','Nevins','Goulter','Joline',1003,132,'2009-04-04'),
97 (204,'rclotworthy3','Elsey','Laterza','Borg',1004,120,'2001-04-22'),
98 (205,'mbacksal4','Starlin','Colhoun','Leeann',1030,94,'2019-03-29'),
99 (206,'rlille5','Sharleen','Lesauhier','Molli',1029,93,'2014-09-18'),
100 (207,'bpurvis6','Erhard','Dreng','Mitchael',1026,81,'2016-01-23'),
101 (208,'kelen7','Martynne','Siggers','Lucas',1024,87,'2016-01-01'),
102 (209,'pkiernan8','Leslie','MacGinney','Alexine',1002,18,'2010-06-08'),
103 (210,'fhannam9','Leonerd','Wonter','Marvin',1010,77,'2005-04-25'),
104 (211,'ichrstineia','Keith','Lilburn','Lita',1016,43,'2001-09-03'),
105 (212,'bdunbabinb','Lula','Cornthwaite','Leonid',1014,120,'2010-07-21'),
106 (213,'cgrogonac','Clim','Lambert','Emerson',1028,37,'2007-06-05'),
107 (214,'apallyd','Eva','Ciccotto','Paten',1018,59,'2008-05-09'),
108 (215,'gstolze','Nicolina','Schelle','Amitie',1017,105,'2018-07-13'),
109 (216,'mhovef','Dwayne','Emmott','Astrid',1007,76,'2022-06-26'),
110 (217,'amoseg','Alexina','Clayfield','Susann',1001,19,'2012-10-28'),
111 (218,'nouchterlonyh','Cindie','Kemster','Melamie',1009,72,'2015-10-07'),
112 (219,'swinklei','Kev','Brocklehurst','Carline',1021,61,'2017-03-10'),
113 (220,'sferensj','Eunice','Squires','Erasmus',1006,15,'2003-12-06'),
114 (221,'mmcelroyk','Rudyard','Fenne','Dillie',1005,20,'2004-02-24'),
115 (222,'mszymonil','Kamillah','Harrow','Pierrette',1011,42,'2009-07-14'),
116 (223,'glooneym','Russ','Corp','Candice',1013,66,'2020-11-02'),
117 (224,'aeddin','Arnaldo','Meth','Meridel',1023,5,'2006-02-17'),
118 (225,'lfareyo','Hewitt','Couttes','Penelope',1015,84,'2002-12-15'),
119 (226,'rsebbornp','Esdras','Silcocks','Tiphani',1022,101,'2011-11-11'),
120 (227,'ldwerryhouseq','Anna-diane','Buxey','Florentia',1012,31,'2021-08-19'),
121 (228,'lbushnellr','Haleigh','Thornham','Kendall',1025,102,'2022-02-20'),
122 (229,'bdaverins','Hansiain','Klesel','Agretha',1020,95,'2016-12-16'),
123 (230,'gdesortst','Edna','Durtne1','Felicity',1027,10,'2014-05-27');
```

4) Screen Shot of Orders Table with Records :

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

ORDER_ID	TITLE	FIRST	MIDDLE	LAST	PRODUCT_ID	NUMBER_SHIPPED	ORDER_DATE
201	cbigley0	Inez	Abad	Heath	1008	145	2018-10-02
202	adanilov1	Vivia	Voice	Wayne	1019	104	2003-11-12
203	glongland2	Nevins	Goulter	Joline	1003	132	2009-04-04
204	rclotworthy3	Elsey	Laterza	Borg	1004	120	2001-04-22
205	mbacksal4	Starlin	Colhoun	Leeann	1030	94	2019-03-29
206	rlille5	Sharleen	Lesauhier	Molli	1029	93	2014-09-18
207	bpurvis6	Erhard	Dreng	Mitchael	1026	81	2016-01-23
208	kelen7	Martynne	Siggers	Lucas	1024	87	2016-01-01
209	pkiernan8	Leslie	MacGinney	Alexine	1002	18	2010-06-08
210	fhannam9	Leonerd	Wonter	Marvin	1010	77	2005-04-25
211	ichrstineia	Keith	Lilburn	Lita	1016	43	2001-09-03
212	bdunbabinb	Lula	Cornthwaite	Leonid	1014	120	2010-07-21
213	cgrogonac	Clim	Lambert	Emerson	1028	37	2007-06-05
214	apallyd	Eva	Ciccotto	Paten	1018	59	2008-05-09
215	gstolze	Nicolina	Schelle	Amitie	1017	105	2018-07-13
216	mhovef	Dwayne	Emmott	Astrid	1007	76	2022-06-26
217	amoseg	Alexina	Clayfield	Susann	1001	19	2012-10-28
218	nouchterlonyh	Cindie	Kemster	Melamie	1009	72	2015-10-07
219	swinklei	Kev	Brocklehurst	Carline	1021	61	2017-03-10
220	sferensj	Eunice	Squires	Erasmus	1006	15	2003-12-06
221	mmcelroyk	Rudyard	Fenne	Dillie	1005	20	2004-02-24
222	mszymonil	Kamillah	Harrow	Pierrette	1011	42	2009-07-14
223	glooneym	Russ	Corp	Candice	1013	66	2020-11-02
224	aeddin	Arnaldo	Meth	Meridel	1023	5	2006-02-17
225	lfareyo	Hewitt	Couttes	Penelope	1015	84	2002-12-15
226	rsebbornp	Esdras	Silcocks	Tiphani	1022	101	2011-11-11
227	ldwerryhouseq	Anna-diane	Buxey	Florentia	1012	31	2021-08-19
228	lbushnellr	Haleigh	Thornham	Kendall	1025	102	2022-02-20
229	bdaverins	Hansiain	Klesel	Agretha	1020	95	2016-12-16
230	gdesortst	Edna	Durtne1	Felicity	1027	10	2014-05-27

30 rows in set (0.00 sec)

FINDING INSIGHTS FROM ABOVE TABLES

- 1) Query to find purchase_date between '2010-1-1' to '2018-1-1' from order Table.

```
mysql> select * from orders where order_date between '2010-1-1' and '2018-1-1';
```

ORDER_ID	TITLE	FIRST	MIDDLE	LAST	PRODUCT_ID	NUMBER_SHIPPED	ORDER_DATE
206	rlille5	Sharleen	Lesauhier	Molli	1029	93	2014-09-18
207	bpurvis6	Erhard	Dreng	Mitchael	1026	81	2016-01-23
208	kelen7	Martynne	Siggers	Lucas	1024	87	2016-01-01
215	gstolze	Nicolina	Schelle	Amitie	1017	105	2018-07-13
217	amoseg	Alexina	Clayfield	Susann	1001	19	2012-10-28
218	nouchterlonyh	Cindie	Kemster	Melamie	1009	72	2015-10-07
219	swinklei	Kev	Brocklehurst	Carline	1021	61	2017-03-10
226	rsebbornp	Esdra	Silcocks	Tiphani	1022	101	2011-11-11
229	bdaverins	Hansiain	Klesel	Agretha	1020	95	2016-12-16
230	gdesortst	Edna	Durtne1	Felicity	1027	10	2014-05-27

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

- 2) Query to find product_name like 'Dell%' & 'TATA%' from products Table.

```
mysql> SELECT PRODUCT_ID,PRODUCT_NAME FROM PRODUCTS WHERE PRODUCT_NAME LIKE 'Dell%' OR PRODUCT_NAME LIKE 'TATA%';
```

PRODUCT_ID	PRODUCT_NAME
1001	Dell Server
1008	TATA Consultant

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

- 3) Extracting Maximum of Starting_inventory and Productname of common products using Aggregate function.

```
mysql> SELECT PRODUCT_ID,PRODUCT_NAME,MAX(STARTING_INVENTORY) FROM PRODUCTS GROUP BY PRODUCT_ID,PRODUCT_NAME LIMIT 10;
```

PRODUCT_ID	PRODUCT_NAME	MAX(STARTING_INVENTORY)
1001	Dell Server	100,007
1002	Google ChromeBooks	100
1003	Cisco Router	45
1004	Sadasd	25
1005	Semih	1
1006	Wipro	32
1007	Cognizant It	210
1008	TATA Consultant	28
1009	MicroSoft Technology	3
1010	It Vedant	8

10 rows in set (0.00 sec)

- 4) Extracting Average of Minium_required and Productname of common products using Aggregate function.

```
mysql> SELECT PRODUCT_ID,PRODUCT_NAME,AVG(MINIMUM_REQUIRED) FROM PRODUCTS GROUP BY PRODUCT_ID,PRODUCT_NAME LIMIT 10;
```

PRODUCT_ID	PRODUCT_NAME	AVG(MINIMUM_REQUIRED)
1001	Dell Server	15.0000
1002	Google ChromeBooks	20.0000
1003	Cisco Router	88.0000
1004	Sadasd	10.0000
1005	Semih	5.0000
1006	Wipro	20.0000
1007	Cognizant It	28.0000
1008	TATA Consultant	5.0000
1009	MicroSoft Technology	35.0000
1010	It Vedant	9.0000

10 rows in set (0.00 sec)

5) Extracting first, second and third highest Inventory Shipped.

a) select * from products order by StartingInventory desc limit 1;

```
mysql> SELECT * FROM PRODUCTS ORDER BY INVENTORY_SHIPPED DESC LIMIT 1;
```

PRODUCT_ID	PRODUCT_NAME	PART_NUMBER	PRODUCT_LABEL	STARTING_INVENTORY	INVENTORY_RECEIVED	INVENTORY_SHIPPED	INVENTORY_ON_HAND	MINIMUM_REQUIRED
1018	All Native Designs	3502	All Native Designs 3502	25	615	980	678	38

1 row in set (0.00 sec)

b) select * from products order by StartingInventory desc limit 1,1;

```
mysql> SELECT * FROM PRODUCTS ORDER BY INVENTORY_SHIPPED DESC LIMIT 1,1;
```

PRODUCT_ID	PRODUCT_NAME	PART_NUMBER	PRODUCT_LABEL	STARTING_INVENTORY	INVENTORY_RECEIVED	INVENTORY_SHIPPED	INVENTORY_ON_HAND	MINIMUM_REQUIRED
1000	Microsoft Technology AWS 1000	92	Microsoft Technology AWS 1000	3	0000	0000	02	32

1 row in set (0.00 sec)

c) select * from products order by StartingInventory desc limit 2,1;

```
mysql> SELECT * FROM PRODUCTS ORDER BY INVENTORY_SHIPPED DESC LIMIT 2,1;
```

PRODUCT_ID	PRODUCT_NAME	PART_NUMBER	PRODUCT_LABEL	STARTING_INVENTORY	INVENTORY_RECEIVED	INVENTORY_SHIPPED	INVENTORY_ON_HAND	MINIMUM_REQUIRED
1012	Aditya Birla Group	AWP 1000	Aditya Birla Group-AWS 1000	250,700	258	957	678	82

1 row in set (0.00 sec)

6) Extracting Oredrs details where number of shipped is more than 80 using Sub Query.

```
mysql> SELECT * FROM ORDERS WHERE ORDER_ID IN(SELECT ORDER_ID FROM PRODUCTS WHERE NUMBER_SHIPPED >80);
```

ORDER_ID	TITLE	FIRST	MIDDLE	LAST	PRODUCT_ID	NUMBER_SHIPPED	ORDER_DATE
201	cbigley0	Inez	Abad	Heath	1008	145	2018-10-02
202	adanilov1	Vivia	Voice	Wayne	1019	104	2003-11-12
203	glongland2	Nevins	Goulter	Joline	1003	132	2009-04-04
204	rclothworthy3	Elsey	Laterza	Borg	1004	120	2001-04-22
205	mbacksal4	Starlin	Colhoun	Leeann	1030	94	2019-03-29
206	rlille5	Sharleen	Lesauhier	Molli	1029	93	2014-09-18
207	bpurvis6	Erhard	Dreng	Mitchael	1026	81	2016-01-23
208	kelen7	Martynne	Siggers	Lucas	1024	87	2016-01-01
212	bdunbabinb	Lula	Cornthwaite	Leonid	1014	120	2010-07-21
215	gstolze	Nicolina	Schelle	Amitie	1017	105	2018-07-13
225	lfareyo	Hewitt	Couttes	Penelope	1015	84	2002-12-15
226	rsebbornp	Esdra	Silcocks	Tiphani	1022	101	2011-11-11
228	lbushnellr	Haleigh	Thornham	Kendall	1025	102	2022-02-20
229	bdaverins	Hansiain	Klesel	Agretha	1020	95	2016-12-16

14 rows in set (0.01 sec)

7) Extracting products details where numbers of product_shipped is more than or equal to 2 and Order_date is between 2022-07-01 and 2022-07-30 using Sub Query.

```
mysql> select * from products where id in(select ProductId from orders where NumberShipped>=2 and OrderDate between "2022-07-01" and "2022-07-30");
```

id	ProductName	PartNumber	ProductLabel	StartingInventory	InventoryReceived	InventoryShipped	InventoryOnHand	MinimumRequired
5	Acer predator triton	triton 300	Acer predator triton 300	100	8758	7845	1013	71
1	Dell XPS	XPS 13	Dell XPS 13	5500	360	75	5785	25

2 rows in set (0.00 sec)

```
mysql>
mysql>
```

8) Extracting Minimum 10 Records Between Suppliers and purchases Table using Right Joint.

```
mysql> select a.supplier_id,a.supplier_name,b.purchase_date
-> from suppliers a right join
-> purchases b on a.supplier_id = b.supplier_id limit 10;
```

supplier_id	supplier_name	purchase_date
8	Oracle	2003-12-06
2	Cloud Tail	2004-02-24
5	ShockWave Tech	2005-04-25
1	Alpha Seller	2017-03-10
3	Acme Tech	2009-07-14
6	Dell BV	2010-06-08
7	AT&T Inc	2015-10-07
4	CDW	2020-11-02
6	Dell BV	2016-01-01
8	Oracle	2012-10-28

10 rows in set (0.00 sec)

9) Extracting Minimum 10 Records Between Products and purchases Table using Left Joint.

```
mysql> select a.product_id,a.product_name,b.title,b.order_date
-> from products a left join
-> orders b on a.product_id = b.product_id limit 10;
```

product_id	product_name	title	order_date
1001	Dell Server	amoseg	2012-10-28
1002	Google ChromeBooks	pkiernan8	2010-06-08
1003	Cisco Router	glongland2	2009-04-04
1004	Sadasd	rclotworthy3	2001-04-22
1005	Semih	mmcelroyk	2004-02-24
1006	Wipro	sferensj	2003-12-06
1007	Cognizant It	mhovef	2022-06-26
1008	TATA Consultant	cbigley0	2018-10-02
1009	MicroSoft Technology	nouchterlonyh	2015-10-07
1010	It Vedant	fhannam9	2005-04-25

10 rows in set (0.00 sec)

10) Extracting Minimum 10 Records Between Purchases and Product Table using inner Joint.

```
mysql> select purchases.purchase_id,products.product_name
-> from purchases inner join products
-> on purchases.product_id = products.product_id group by purchase_id,product_name limit 10;
```

purchase_id	product_name
118	Dell Server
112	Google ChromeBooks
119	Google ChromeBooks
111	Cisco Router
127	Sadasd
116	Semih
129	Wipro
120	Cognizant It
113	TATA Consultant
102	MicroSoft Technology

10 rows in set (0.00 sec)

11) Extracting Minimum 10 Records from Purchases and Suppliers Table using Full Joint.

```
mysql> select * from suppliers left join purchases on suppliers.supplier_id = purchases.supplier_id
-> union
-> select * from purchases right join suppliers on purchases.supplier_id = suppliers.supplier_id limit 10;
```

SUPPLIER_ID	SUPPLIER_NAME	PURCHASE_ID	SUPPLIER_ID	PRODUCT_ID	NUMBER_RECEIVED	PURCHASE_DATE
1	Alpha Seller	104	1	1030	61	2017-03-10
1	Alpha Seller	116	1	1005	105	2018-07-13
1	Alpha Seller	124	1	1016	132	2009-04-04
2	Cloud Tail	102	2	1009	20	2004-02-24
2	Cloud Tail	115	2	1012	93	2014-09-18
2	Cloud Tail	117	2	1019	101	2011-11-11
2	Cloud Tail	128	2	1018	43	2001-09-03
3	Acme Tech	105	3	1015	42	2009-07-14
3	Acme Tech	114	3	1020	84	2002-12-15
3	Acme Tech	123	3	1023	102	2022-02-20

10 rows in set (0.00 sec)

```
mysql>
```