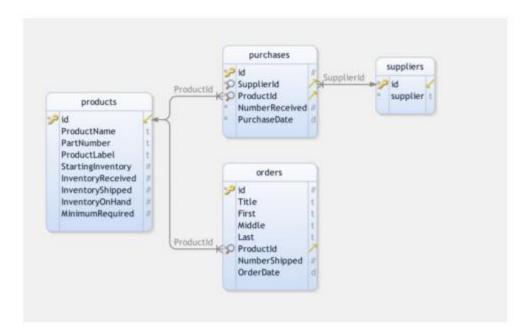
Project on MySQL



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

The diagram shows the number of tables along with the relationship between tables. All the tables with respective columns are provided.

You are required to create the system with proper tables along with their relationship. You are also required to put in around dummy data inside the table so as to get some insights.

DATABASE USED

mysql> use project1; Database changed

TABLE PRODUCTS

CREATING TABLE PRODUCTS :

CREATE TABLE PRODUCTS(

- ->product_id int primary key,
- ->product name varchar(250),
- ->part_number varchar(250),
- ->product_label varchar(250),
- ->starting_inventory bigint,
- ->inventory_received int,
- ->inventory_onhand tinyint,
- ->minimum_required int);

DESCRIBE TABLE PRODUCTS :

desc products;

MySQL 8.0 Command Line Client

```
mysql> desc products;
                                    | Null | Key | Default | Extra
 Field
                     Type
 product id
                                     NO
                                                  NULL
                     varchar(250)
 product_name
                                     YES
                                                  NULL
                    varchar(250)
varchar(250)
 part_number
                                     YES
                                                  NULL
 product_label
                                     YES
                                                  NULL
                    bigint
 starting_inventory
                                     YES
                                                  NULL
 inventory_received | int
                                     YES
                                                  NULL
                                     YES
 inventory_onhand
                      tinyint
                                                  NULL
 minimum_required
                                     YES
                      int
                                                  NULL
 inventory_shipped | int
                                     YES
                                                  NULL
9 rows in set (0.14 sec)
mysql>
```

> INSERT INTO TABLE PRODUCTS:

```
### DISERT INTO PRODUCTS(product_id, product_name, part_number, product_label, starting_inventory_shipped)

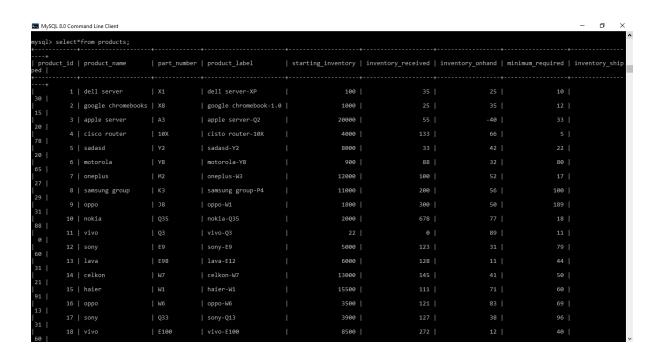
> WALUES(4, clsco router', '10X', 'cisto router-10X', 4000,133,66,5,78),

- (5, 'sadasd', 'V2', 'sadasd', 'Y2', 'soequal-N', '0000,331,42,22,20),

- (6, 'motorola', 'N3', 'mo
```

> SELECT STATEMENT TO SHOW TABLE PRODUCTS:

Select*from products;



15	haier	W1	haier-W1	15500			60
16	орро	W6	oppo-W6	3500	121		69
	sony	Q33	sony-Q13	3900		38	96
18	vivo	E100	vivo-E100	8500			40
	oneplus	E152	oneplus-E152	18000			16
20	apple server	K78	apple server-K78	25000	300	14	66
	motorola		motorola-K7	2500	312	50	66
	nokia	A100	nokia-A100	8700			64
	xiaomi	A12	xiaomi-A12	6600	189	64	44
24	lenova	T43	lenova-T43	7000	222	46	
	celkon	Q217	celkon-Q217	14500	541	48	68
	lava	Q90	lava-Q90	5800			
	xiaomi	A33	xiaomi-A33	6600	197		
28	samsung group	K367	samsung group-K365	1000	800		300
29	sadasd	Y200	sadasd-Y200	8900	30		
30	oneplus	M25	oneplus-W36	12000	100		

TABLE SUPPLIERS

CREATE TABLE SUPPLIERS :

CREATE TABLE SUPPLIERS(

- ->supplier id int primary key,
- ->supplier_name varchar(250));

mysql> CREATE TABLE SUPPLIERS(supplier_id int primary key,supplier_name varchar(250)); Query OK, 0 rows affected (0.03 sec)

DESCRIBE TABLE SUPPLIERS :

desc suppliers;

> INSERT INTO SUPPLIERS:

```
mysql> INSERT INTO SUPPLIERS(supplier_id,supplier_name)VALUES(100,'acme tech'),
-> (101,'alpha user'),
-> (102,'alpha seller'),
-> (103,'good coder'),
-> (104,'cloudtail'),
-> (105,'apple user'),
-> (106,'iphone user'),
-> (107,'vivo user'),
-> (108,'oppo user');
Query OK, 9 rows affected (0.01 sec)
Records: 9 Duplicates: 0 Warnings: 0
```

> SELECT STATEMENT TO SHOW TABLE SUPPLIERS:

Select*from suppliers;

```
mysql> select*from suppliers;
 supplier_id | supplier_name
         100
               acme tech
         101
             | alpha user
         102
             | alpha seller
         103 good coder
         104
               cloudtail
         105
               apple user
               iphone user
         106
         107
               vivo user
         108 I
               oppo user
 rows in set (0.00 sec)
```

TABLE PURCHASES

CREATE TABLE PURCHASES:

CREATE TABLE PURCHASES(

- ->purchase id int primary key,
- ->supplier id int,
- ->product id int,
- ->number_received varchar(250),
- ->purchase date date,
- ->foreign key(supplier_id) references SUPPLIERS(supplier_id),
- ->foreign key(product_id) references PRODUCTS(product_id));

mysql> CREATE TABLE PURCHASES(purchase_id int primary key, supplier_id int, product_id int, number_received varchar(250), purchase_date date,
-> foreign key(supplier_id) references SUPPLIERS(supplier_id),
-> foreign key(product_id) references PRODUCTS(product_id));
Query OK, 0 rows affected (0.08 sec)

DESCRIBE TABLE PURCHASES :

desc purchases;

```
mysql> desc purchases;
 Field
                                    Null | Key | Default | Extra
                    Type
 purchase_id
                    int
                                    NO
                                            PRI
                                                  NULL
 supplier_id
product_id
                    int
                                    YES
                                            MUL
                                                  NULL
                    int
                                    YES
                                            MUL
                                                  NULL
 number_received
                    varchar(250)
                                    YES
                                                  NULL
 purchase_date
                   date
                                    YES
                                                  NULL
 rows in set (0.00 sec)
```

> INSERT INTO TABLE PURCHASES :

> SELECT STATEMENT TO SHOW TABLE PURCHASES:

Select*from purchases;

rchase_id	supplier_id	product_id	number_received	purchase_date
300	100	1	22	 2022-06-01
301	101	2	32	2022-06-02
302	102	2	52	2022-06-03
303	102	15	41	2022-06-04
304	103	17	61	2022-06-05
305	104	18	69	2022-06-06
306	105	19	89	2022-06-07
307	106	20	11	2022-06-08
308	107	21	18	2022-06-09
309	108	29	31	2022-06-10
310	102	12	53	2022-06-11
311	104	13	93	2022-06-12
312	105	14	13	2022-06-13
313	106	17	60	2022-06-14
314	107	18	50	2022-06-15
315	108	19	80	2022-06-16
316	108	3	10	2022-06-17
317	101	5	37	2022-06-18
318	102	6	47	2022-06-19
319	103	8	66	2022-06-20
320	104	9	69	2022-06-21
321	105	10	31	2022-06-22
322	104	11	67	2022-06-23
323	108	12	87	2022-06-24
324	103	13	22	2022-06-25
325	103	13	59	2022-06-26
326	107	15	49	2022-06-27
327	108	16	22	2022-06-28
328	107	10	59	2022-06-29
329	100	16	55	2022-06-30

TABLE ORDERS

CREATE TABLE ORDERS:

CREATE TABLE ORDERS(

- ->order_id int primary key,
- ->title varchar(250),
- ->first varchar(200),
- ->middle varchar(200),
- ->last varchar(200),
- ->product_id int,
- ->number_shipped smallint,
- ->order date date,
- ->foreign key(product_id) references PRODUCTS(product_id));

```
mysql> CREATE TABLE ORDERS(order_id int primary key,title varchar(250),first varchar(200),middle varchar(200),last varchar(200),product_id int,
-> number_shipped smallint,order_date date,
-> foreign key(product_id) references PRODUCTS(product_id));
Query ΟΚ, θ rows affected (θ.08 sec)
```

DESCRIBE TABLE ORDERS :

desc orders;

Field	Туре	Null	Key	Default Extra
order_id	int	NO	PRI	NULL
title	varchar(250)	YES	No.	NULL
	varchar(200)	YES		NULL
first	varchar(200)	YES		NULL
middle	varchar(200)	YES	1	NULL
last		YES	MUL	NULL
product_id	smallint	YES	1000	NULL
number_shipped order_date	date	YES		NULL

> INSERT INTO TABLE ORDERS :

> SELECT STATEMENT TO SHOW TABLE ORDERS:

Select*from orders

rder_id	title	first	middle	last	product_id	number_shipped	order_date
200	myntra	test	cowley	 suzy	1	12	2022-09-01
201	nykaa	correia	centra	suzy	1	13	2022-09-02
202	myntra	demo	test	user	3	1	2022-09-03
203	amazon	good	test	coder	12	25	2022-09-04
204	flipkart	good	demo	coder	2	10	2022-09-05
205	shein	juda	demo	correia	3	11	2022-09-06
206	flipkart	good	demo	lopes	5	13	2022-09-08
207	amazon	good	coder	machado	6	14	2022-09-09
208	shein	sasha	demo	correia	6	25	2022-09-10
209	club factory	stacy	sunil	correia	12	30	2022-09-11
210	club factory	nash	neo	lopes	13	33	2022-09-12
211	fraazo	juda	neo	lopes	17	39	2022-09-13
212	shopea	scaru	jeso	user	15	40	2022-09-14
213	amazon	good	jeso	coder	16	35	2022-09-15
214	shopea	sam	ram	user	20	41	2022-09-16
215	flipkart	ram	demo	lopes	21	45	2022-09-17
216	fraazo	sham	neo	correia	22	39	2022-09-18
217	club factory	sheru	charles	machado	23	31	2022-09-19
218	shopea	scaru	ram	demo	24	40	2022-09-20
219	shein	kyle	demo	correia	25	46	2022-09-21
220	fraazo	mikhu	demo	machado	25	51	2022-09-22
221	flipkart	tobo	coder	lopes	26	33	2022-09-23
222	shopea	ross	mark	demello	27	43	2022-09-24
223	wish	laura	lance	demello	22	61	2022-09-25
224	wish	savil	ram	machado	22	31	2022-09-26
225	myntra	swinal	demo	user	23	41	2022-09-27
226	myntra	linel	neo	user	29	49	2022-09-28

❖ FINDING INSIGHTS FROM THE ABOVE TABLES:

- 1. fetch the product name where name start with d
- → select product_name from products where product_name like 'd%';

```
mysql> select product_name from products where product_name like 'd%';

+-----+
| product_name |

+-----+
| dell server |

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

- 2. show the product name, its count and order it in ascending
- → select product_name,count(product_name) as new from products group by product_name order by new asc;

```
MySQL 8.0 Command Line Client
mysql> select product_name.count(product_name) as new from products group by product_name order by new asc;
                     new
 product name
 dell server
 google chromebooks
 cisco router
 haier
 lenova
 apple server
 sadasd
 motorola
 samsung group
 oppo
 nokia
 sony
  lava
 celkon
 xiaomi
 oneplus
  rows in set (0.01 sec)
```

- 3. fetch name from products and total of minimum required with limit as 5
- → select product_name,sum(minimum_required) as total from products group by product name limit 5;

- 4. show id from orders where date between '2022-09-01' and '2022-09-05'
- → select order_id from orders where order_date between '2022-09-01' and '2022-09-05';

- 5. fetch first from order where 3rd char is d
- → select first from orders where first like '__d_';

```
mysql> select first from orders where first like '__d_';

+----+
| first |

+----+
| juda |
| juda |

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

- 6. write a subquery to update supplier_name = 'netflix user' using purchases table
- → update suppliers set supplier_name='netflix user' where supplier_id in(select supplier_id from purchases where supplier_id=100);

```
mysql> update suppliers set supplier_name='netflix user' where supplier_id in(select supplier_id from purchases where supplier_id=100);
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select*from suppliers;

| supplier_id | supplier_name |
| 100 | netflix user |
| 101 | alpha user |
| 102 | alpha seller |
| 103 | good coder |
| 104 | cloudtail |
| 105 | apple user |
| 106 | iphone user |
| 107 | vivo user |
| 108 | oppo user |
| 109 | netflix user |
```

- 7. fetch number received,date,name,part number from purchases and left join between purchases and products
- → select purchases.number_received,purchases.purchase_date,
 - -> products.product_name,products.part_number
 - -> from products
 - -> left join purchases on products.product_id=purchases.product_id;

MvSQL 8.0 Command Line Client sql> select purchases.number received,purchases.purchase date,products.product name,products.part number -> left join purchases on products.product_id=purchases.product_id; part_number number_received | purchase_date | product_name 2022-06-01 dell server 2022-06-02 google chromebooks X8 2022-06-03 google chromebooks X8 2022-06-17 apple server cisco router 10X 2022-06-18 sadasd 2022-06-19 Y8 motorola NULL NULL oneplus K3 J8 2022-06-20 samsung group 2022-06-21 oppo 2022-06-22 nokia Q35 2022-06-29 nokia Q35 Q3 E9 2022-06-23 2022-06-11 sony 2022-06-24 E9 sony 2022-06-12 lava E98 2022-06-25 lava 2022-06-26 lava E98 2022-06-13 celkon W7 2022-06-04 haier 2022-06-27 haier W1 2022-06-28 W6 oppo 2022-06-30 W6 oppo 2022-06-05 Q33 sony 2022-06-14 sony 2022-06-06 vivo E100 2022-06-15 2022-06-07 oneplus 2022-06-16 oneplus 2022-06-08 apple server K78 2022-06-09 motorola NULL nokia A100 NULL xiaomi NULL NULL lenova

Q217

Q90

NULL

NULL

NULL

NULL

NULL

NULL

celkon

xiaomi

- 8. concatinate the first, middle and last as newname from orders with limit as 10
- → select concat(first," ",middle," ",last) as newname from orders limit 10;

- 9. concatinate first, middle and last from order and inner join between products and orders and also the name of the product must start with a
- → select concat(first," ",middle," ",last) as newname
 - -> from orders
 - -> inner join products on orders.product_id=products.product_id
 - -> where product name like 'a%';

MySQL 8.0 Command Line Client

- 10. show ID, title from orders where first in 'demo' and 'sam'
- → select order_id, title from orders where first in('demo','sam');

- 11. fetch id, title, first from orders where number shipped is greater than 35
- → select order id, title, first from orders where number shipped>35;

```
mysql> select order_id, title,first from orders where number_shipped>35;
                       | first
 order_id | title
                        juda
             fraazo
       211
       212
             shopea
                        scaru
       214
             shopea
                        sam
       215
             flipkart
                        ram
       216
             fraazo
                        sham
       218
             shopea
                        scaru
       219
             shein
                        kyle
       220
             fraazo
                        mikhu
       222
             shopea
                        ross
       223
             wish
                        laura
       225
             myntra
                        swinal
       226
             myntra
                        linel
12 rows in set (0.00 sec)
```

- 12. show id,number shipped from orders and fetch the first largest number shipped
- select order_id,number_shipped from orders order by number_shipped
 -> desc limit 0,1;

```
mysql> select order_id,number_shipped from orders order by number_shipped desc limit 0,1;

+------+

| order_id | number_shipped |

+------+

| 223 | 61 |

+------+

1 row in set (0.00 sec)
```

- 13. show id, number shipped from orders and fetch the second largest number shipped
- → select order_id,number_shipped from orders order by number_shipped-> desc limit 1,1;

```
mysql> select order_id,number_shipped from orders order by number_shipped desc limit 1,1;

+------+

| order_id | number_shipped |

+------+

| 220 | 51 |

+------+

1 row in set (0.00 sec)
```

- 14. fetch name from suppliers where id not in 100,103,106,108
- → select supplier_name from suppliers where supplier_id not in(100,103,106,108);

- 15. delete from orders where id=226
- → delete from orders where order_id=226;

ql> seled							
	t*from orders;		.	·			
order_id	title	first	middle	last	product_id	number_shipped	order_date
200	myntra	test	cowley	suzy		12	2022-09-01
201	nykaa	correia	centra	suzy	1	13	2022-09-02
202	myntra	demo	test	user	3	1	2022-09-03
203	amazon	good	test	coder	12	25	2022-09-04
204	flipkart	good	demo	coder	2	10	2022-09-05
205	shein	juda	demo	correia	3	11	2022-09-06
206	flipkart	good	demo	lopes	5	13	2022-09-08
207	amazon	good	coder	machado	6	14	2022-09-09
208	shein	sasha	demo	correia	j 6 j	25	2022-09-10
209	club factory	stacy	sunil	correia	12	30	2022-09-11
210	club factory	nash	neo	lopes	13	33	2022-09-12
211	fraazo	juda	neo	lopes	17	39	2022-09-13
212	shopea	scaru	jeso	user	15	40	2022-09-14
213	amazon	good	jeso	coder	16	35	2022-09-15
214	shopea	sam	ram	user	20	41	2022-09-16
215	flipkart	ram	demo	lopes	21	45	2022-09-17
216	fraazo	sham	neo	correia	22	39	2022-09-18
217	club factory	sheru	charles	machado	23	31	2022-09-19
218	shopea	scaru	ram	demo	24	40	2022-09-20
219	shein	kyle	demo	correia	25	46	2022-09-21
220	fraazo	mikhu	demo	machado	25	51	2022-09-22
221	flipkart	tobo	coder	lopes	26	33	2022-09-23
222	shopea	ross	mark	demello	27	43	2022-09-24
223	wish	laura	lance	demello	22	61	2022-09-25
224	wish	savil	ram	machado	22	31	2022-09-26
225	myntra	swinal	demo	user	23	41	2022-09-27

THANK YOU