

Pharmacy Drugs Inventory Management

Milestone: Implementation in MySQL

Group 11

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Implementation Model:

show databases;

create database inventory;

use inventory;

create table orders

(order_id Int primary key, pharmacy_id int, shipment_id int, order_date varchar(50), payment_type varchar(100), total_amount int);

```
50 • desc orders;
```

Field	Type	Null	Key	Default	Extra
order_id	int	NO	PRI	NULL	
pharmacy_id	int	YES		NULL	
shipment_id	int	YES	MUL	NULL	
order_date	varchar(50)	YES		NULL	
payment_type	varchar(100)	YES		NULL	
total_amount	int	YES		NULL	

create table order_details

(order_id INT, drug_id INT, quantity int);

```
50 • desc order_details;
```

Field	Type	Null	Key	Default	Extra
order_id	int	YES	MUL	NULL	
drug_id	int	YES	MUL	NULL	
quantity	int	YES		NULL	

create table stock_details

(stock_id int primary key, drug_id int, warehouse_id int, stock_left int,
last_ordered_date varchar(30), last_updated_date varchar(30), mfg_date varchar(30),
exp_date varchar(30));

```
50 • desc stock_details;
```

Result Grid Filter Rows: Export: Wrap Cell Content:						
	Field	Type	Null	Key	Default	Extra
►	stock_id	int	NO	PRI	NULL	
	drug_id	int	YES	MUL	NULL	
	warehouse_id	int	YES	MUL	NULL	
	stock_left	int	YES		NULL	
	last_ordered_date	varchar(30)	YES		NULL	
	last_updated_date	varchar(30)	YES		NULL	
	mfg_date	varchar(30)	YES		NULL	
	exp_date	varchar(30)	YES		NULL	

create table shipment_details

(shipment_id int primary key, warehouse_id int, shipment_start_date varchar(30),
order_id int, shipment_end_date varchar(30));

```
50 • desc shipment_details;
```

Result Grid Filter Rows: Export: Wrap Cell Content:						
	Field	Type	Null	Key	Default	Extra
►	shipment_id	int	NO	PRI	NULL	
	warehouse_id	int	YES	MUL	NULL	
	shipment_start_date	varchar(30)	YES		NULL	
	order_id	int	YES	MUL	NULL	
	shipment_end_date	varchar(30)	YES		NULL	

create table suppliers

(supplier_id int primary key, company_name varchar(30), manufacturer
varchar(30), phone_no int(10), address varchar(50));

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```
50 • desc suppliers;
```

Result Grid						
		Filter Rows:				
		Export:				
		Wrap Cell Content:				
	Field	Type	Null	Key	Default	Extra
▶	supplier_id	int	NO	PRI	NULL	
	company_name	varchar(30)	YES		NULL	
	manufacturer	varchar(30)	YES		NULL	
	phone_no	varchar(15)	YES		NULL	
	address	varchar(50)	YES		NULL	

create table drugs

(drug_id int primary key, drug_name varchar(30), manufacturer varchar(30), mrp_price int, supplier_id int);

```
50 • desc drugs;
```

Result Grid						
		Filter Rows:				
		Export:				
		Wrap Cell Content:				
	Field	Type	Null	Key	Default	Extra
▶	drug_id	int	NO	PRI	NULL	
	drug_name	varchar(30)	YES		NULL	
	manufacturer	varchar(30)	YES		NULL	
	mrp_price	int	YES		NULL	
	supplier_id	int	YES	MUL	NULL	

create table warehouse_details

(warehouse_id int primary key, warehouse_name varchar(30), address varchar(50), phone_no bigint, zipcode int(10));

```
50 • desc warehouse_details;
```

Result Grid						
		Filter Rows:				
		Export:				
		Wrap Cell Content:				
	Field	Type	Null	Key	Default	Extra
▶	warehouse_id	int	NO	PRI	NULL	
	warehouse_name	varchar(30)	YES		NULL	
	address	varchar(50)	YES		NULL	
	phone_no	bigint	YES		NULL	
	zipcode	int	YES		NULL	

Create Table pharmacy

(pharmacy_id int primary key, pharmacy_name Varchar(100), address varchar(150), phone_no bigint);

```
50 • desc pharmacy;
```

Field	Type	Null	Key	Default	Extra
pharmacy_id	int	NO	PRI	NULL	
pharmacy_name	varchar(100)	YES		NULL	
address	varchar(150)	YES		NULL	
phone_no	bigint	YES		NULL	

After creating the table it is how it looks

The screenshot shows a database management interface with a 'SCHEMAS' panel on the left and a SQL editor on the right. The 'inventory' schema is selected, and a list of tables is shown, including 'pharmacy'. The SQL editor displays the following code:

```
10 (order_id INT, drug_id INT, quantity int);
11
12 • desc order_details;
13
14 • create table stock_details
15 (stock_id int primary key, drug_id int, warehouse_id int, stock_left int, last_ordered_date date, last_updated_date date, mfg_da
16
17 • create table shipment_details(shipment_id int primary key, warehouse_id int, shipment_start_date date, order_id int, shipment_enc
18
19 • create table suppliers
20 (supplier_id int primary key, company_name varchar(30), manufacturer varchar(30), phone_no int(10), address varchar(50));
21
22 • create table drugs
23 (drug_id int primary key, drug_name varchar(30), manufacturer varchar(30), mrp_price int, supplier_id int);
24
25 • create table warehouse_details
26 (warehouse_id int primary key, warehouse_name varchar(30), address varchar(50), phone_no int(10), zipcode int(10));
27
28 • Create Table pharmacy
29 (pharmacy_id int primary key, pharmacy_name Varchar(30), address varchar(50), phone_no int(10), zipcode int(10));
30
31
32
```

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After inserting the data into the table, It looks like below, in the same way we have inserted the data into all the tables

```
32 • select * from pharmacy;
```

pharmacy_id	pharmacy_name	address	phone_no
180	Revco Discount Drugs	11 Birchpond Rd.	4041883564
228	Rxtra	Carlisle, PA 17013	6908862135
270	Wellfresh	Randallstown, MD 21133	8905877791
271	Genovese Drug Store	59 Glenwood Ave.	6776442263
280	IDL Drug Stores	1 Creek Dr.	3612781439
288	Marsh Drug Store	10 S. Griffin Ave.	1424435590
318	Pharma Street	Temple Hills, MD 20748	3079923004
352	Good Neighbor Pharmacy	693 Valley Street	7283988425
353	Pharmanic	Massillon, OH 44646	5574939369
371	Kerr Drug	9238 Glen Creek Cirde	2745590685
418	Health Corner	Palm Bay, FL 32907	3492792836
434	Mediserv	480 Newport Drive	4386745897

pharmacy 4 x Apply Revert

Warehouse_details

```
34 • select * from warehouse_details;
```

warehouse_id	warehouse_name	address	phone_no	zipcode
1	Pharmacy Warehouse_50	Frederick, MD 21701	8271351459	2264
2	Pharmacy Warehouse_46	Westmont, IL 60559	4049276545	2260
4	Pharmacy Warehouse_9	6 Myrtle Ave.	8951822228	2223
5	Pharmacy Warehouse_23	8361 Cypress St.	4041883564	2237
6	Pharmacy Warehouse_51	885 Elmwood Road	7072010444	2265
9	Pharmacy Warehouse_40	Pearl, MS 39208	6777899423	2254
10	Pharmacy Warehouse_35	388 Argyle Street	2139959509	2249
11	Pharmacy Warehouse_49	638 S. Bayport Drive	4386745897	2263
12	Pharmacy Warehouse_10	Perth Amboy, NJ 08861	1424435590	2224
13	Pharmacy Warehouse_59	Beverly, MA 01915	1395266025	2273
15	Pharmacy Warehouse_39	979 Talbot St.	2472601117	2253
16	Pharmacy Warehouse_7	7321 Westminster Ave.	3791899814	2221

warehouse_details 10 x Apply Revert

Suppliers:

```
33 • select * from suppliers;
```

supplier_id	company_name	manufacturer	phone_no	address
84	Better Life	NULL	8265656349	43 North Heritage Court
85	Medisuite	NULL	2526008662	348 W. Saxton Rd.
86	Bioplus Specialty	NULL	9782493797	Harrison Township, MI 48045
87	PrecisionMed	NULL	5783542944	Cranston, RI 02920
88	GenScripts	NULL	2689776267	Waynesboro, PA 17268
89	Drug Blend	NULL	5172571439	19 Lakeview Drive
91	Envolve Health	NULL	2670036315	9 W. Crescent Lane
94	cvs	NULL	6380088782	Flowery Branch, GA 30542
97	Caremark	NULL	3984731371	73 Creek Street
98	The Rx Advocates	NULL	7739526220	7437 W. Union Ave.
100	MedMinder	NULL	3027470143	7077 Mechanic Rd.
NULL	NULL	NULL	NULL	NULL

suppliers 13 x Apply Revert

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Orders:

```
34 • select * from orders;
35
36
```

	order_id	pharmacy_id	shipment_id	order_date	payment_type	total_amount
▶	112	733	2004	4/6/2022	Online	23630
	123	465	4691	10/9/2022	Online	10633
	135	976	9827	12/22/2021	Online	48684
	151	371	5236	9/5/2022	Offline	14347
	163	321	4478	8/27/2022	Offline	43824
	166	653	9914	4/15/2022	Online	22302
	184	210	6321	8/23/2021	Online	27029
	187	434	2394	11/1/2021	Offline	15983
	188	650	5740	10/20/2021	Online	21761
	258	877	4445	2/12/2021	Offline	15041
	262	772	3191	1/25/2021	Online	27284
	269	277	6739	1/14/2021	Offline	21136

Stock_details:

```
35 • select * from stock_details;
36
```

	stock_id	drug_id	warehouse_id	stock_left	last_ordered_date	last_updated_date	mfg_date	exp_date
▶	1022	97	74	402	3/31/2022	9/25/2022	7/10/2014	11/3/2024
	1070	37	16	474	1/23/2022	9/17/2022	3/7/2009	2/3/2024
	1160	65	20	794	5/10/2022	10/11/2022	1/27/2017	1/31/2023
	1198	30	10	240	6/30/2022	9/25/2022	12/3/2006	12/29/2025
	1220	82	32	169	2/25/2022	9/12/2022	12/19/2001	7/16/2023
	1439	12	31	210	3/9/2022	9/14/2022	6/29/2002	10/4/2023
	1470	31	61	377	1/26/2022	9/18/2022	6/30/2010	2/16/2024
	1474	50	66	227	9/29/2022	10/24/2022	10/6/2021	5/7/2024
	1490	6	43	996	1/9/2022	9/11/2022	11/25/2000	5/2/2023
	1495	95	89	462	6/14/2022	10/20/2022	5/18/2019	12/26/2023
	1718	99	35	884	7/4/2022	10/1/2022	6/27/2008	7/6/2026
	1755	94	19	948	3/19/2022	9/16/2022	1/6/2003	4/3/2024

Shipment_details:

```
38 • select * from shipment_details;
39
40
41
42
```

	shipment_id	warehouse_id	shipment_start_date	order_id	shipment_end_date
▶	1039	53	12/3/2020	589	4/9/2023
	1043	74	11/16/2020	468	12/22/2022
	1400	17	3/4/2020	609	12/11/2022
	1588	90	8/27/2020	519	1/22/2023
	1590	30	3/19/2020	315	10/16/2022
	1740	22	4/24/2020	669	11/16/2022
	1775	47	7/25/2021	566	7/14/2023
	1934	9	2/21/2021	445	5/3/2023
	2004	88	3/30/2021	112	1/29/2023
	2046	81	2/3/2020	358	10/13/2022
	2262	1	10/20/2019	295	10/5/2022
	2394	52	1/2/2021	187	12/28/2022

Creating Foreign Key relation for the Tables:

```
ALTER TABLE drugs ADD FOREIGN KEY (supplier_id) REFERENCES  
suppliers(supplier_id);
```

```
ALTER TABLE shipment_details ADD FOREIGN KEY (warehouse_id) REFERENCES  
warehouse_details(warehouse_id);
```

```
ALTER TABLE stock_details ADD FOREIGN KEY (warehouse_id) REFERENCES  
warehouse_details(warehouse_id);
```

```
ALTER TABLE order_details ADD FOREIGN KEY (order_id) REFERENCES  
orders(order_id);
```

```
ALTER TABLE shipment_details ADD FOREIGN KEY (order_id) REFERENCES  
orders(order_id);
```

```
ALTER TABLE order_details ADD FOREIGN KEY (drug_id) REFERENCES  
drugs(drug_id);
```

```
ALTER TABLE stock_details ADD FOREIGN KEY (drug_id) REFERENCES  
drugs(drug_id);
```

```
ALTER TABLE orders ADD FOREIGN KEY (shipment_id) REFERENCES  
shipment_details(shipment_id);
```

Basic Analysis:

1. select * from orders where total_amount>25000

order by total_amount desc;

Checking the all the orders which have total amount more than 25000 and
ordered by total_amount in descending order


```
50 • select * from orders where total_amount>25000
51 order by total_amount desc;
52
```

Result Grid						
Filter Rows:		Edit:		Export/Import:		
order_id	pharmacy_id	shipment_id	order_date	payment_type	total_amount	
896	170	3937	5/17/2021	Online	49763	
712	628	3798	3/1/2021	Online	49702	
662	809	2738	7/22/2022	Online	48800	
135	976	9827	12/22/2021	Online	48684	
519	263	1588	4/20/2021	Online	47932	
723	827	5536	1/12/2022	Offline	47915	
683	304	9325	7/8/2022	Online	47446	
956	891	5420	5/29/2021	Online	47285	
457	344	4544	1/6/2022	Offline	46736	
694	610	9535	6/16/2022	Online	46364	
998	720	7772	8/31/2021	Offline	45954	
641	417	6999	10/4/2022	Online	44223	

orders 14 x

- select * from orders where total_amount>25000 and order_date<'12/31/2021'
order by total_amount desc;

Now I have added one more filter condition to check orders of year 2021

```
50 • select * from orders where total_amount>25000 and order_date<'12/31/2021'
51 order by total_amount desc;
52
```

Result Grid						
Filter Rows:		Edit:		Export/Import:		
order_id	pharmacy_id	shipment_id	order_date	payment_type	total_amount	
135	976	9827	12/22/2021	Online	48684	
723	827	5536	1/12/2022	Offline	47915	
457	344	4544	1/6/2022	Offline	46736	
641	417	6999	10/4/2022	Online	44223	
352	241	8297	11/8/2021	Online	42617	
359	154	3154	10/5/2021	Online	40702	
926	501	7122	1/14/2021	Online	36880	
262	772	3191	1/25/2021	Online	27284	
589	613	1039	12/28/2021	Online	25211	
*	NULL	NULL	NULL	NULL	NULL	

3. select * from orders join order_details
on orders.order_id=order_details.order_id
where orders.total_amount>25000 and orders.order_date<'12/31/2021'
order by orders.total_amount desc;

```

50 • select * from orders join order_details
51   on orders.order_id=order_details.order_id
52   where orders.total_amount>25000 and orders.order_date<'12/31/2021'
53   order by orders.total_amount desc;
54

```

order_id	pharmacy_id	shipment_id	order_date	payment_type	total_amount	order_id	drug_id	quantity
135	976	9827	12/22/2021	Online	48684	135	99	46
723	827	5536	1/12/2022	Offline	47915	723	11	38
457	344	4544	1/6/2022	Offline	46736	457	22	49
641	417	6999	10/4/2022	Online	44223	641	48	36
352	241	8297	11/8/2021	Online	42617	352	39	42
359	154	3154	10/5/2021	Online	40702	359	68	64
926	501	7122	1/14/2021	Online	36880	926	23	50
262	772	3191	1/25/2021	Online	27284	262	7	79
589	613	1039	12/28/2021	Online	25211	589	91	52

Result 20 x Read Only

4. select * from stock_details
where stock_left <200;
Which means we have less stock left for those drugs

```

55 • select * from stock_details
56   where stock_left <200;
57

```

stock_id	drug_id	warehouse_id	stock_left	last_ordered_date	last_updated_date	mfg_date	exp_date
1220	82	32	169	2/25/2022	9/12/2022	12/19/2001	7/16/2023
2264	39	95	195	4/12/2022	9/30/2022	1/17/2015	10/6/2025
2475	46	92	76	4/15/2022	10/1/2022	4/1/2015	11/5/2025
2830	28	77	68	10/13/2022	10/25/2022	7/20/2020	12/16/2022
2967	74	51	55	4/29/2022	10/2/2022	6/13/2008	10/2/2024
3273	23	42	36	12/7/2021	9/1/2022	1/11/2003	10/31/2022
3396	58	85	178	6/4/2022	10/12/2022	10/14/2017	6/3/2023
3527	4	63	108	7/2/2022	9/30/2022	8/12/2007	3/28/2026
4123	40	75	11	5/3/2022	9/16/2022	11/2/2005	10/1/2025
4342	60	22	109	1/14/2022	9/14/2022	1/3/2009	12/7/2023
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

stock_details22 x Apply Revert