

**CSE 2211 - Database Management Systems - I Lab
Project Report**

**Project Name:
Medical Supply Management System**

Team No: 14(Odd)

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1. INTRODUCTION

1.1 OBJECTIVES:

- The main objective of the project is to design and develop a user friendly system
 - Easy to use and an efficient computerized system.
 - To develop an accurate and flexible system, it will eliminate data redundancy.
 - To study the functioning of pharmacy supply management System.
 - To make software with good user interface so that user can change it and it should be used for a long time without error and maintenance.
 - To provide synchronized and centralized farmer and seller database.
 - Computerization can be helpful as a means of saving time and money.
 - To provide better Graphical User Interface (GUI).
 - Less chances of information leakage.
 - Provides Security to the data by using login and password method.
 - To provide immediate storage and retrieval of data and information.
 - Improving arrangements for medicines coordination.
 - Reducing paperwork.

1.2 LIMITATIONS:

- Time consumption in data entry as the records are to be manually maintained consumes a lot of time.

- Lot of paper work is involved as the records are maintained in the files and registers.
- Storage Requires as files and registers are used the storage space requirement is increased.
- Less Reliable use of papers for storing valuable data information is not at all reliable.

2. STUDY OF EXISTING SYSTEM

2.1 CASE STUDY

Rising debt, cost-cutting, and layoffs in health care-delivery facilities, alluded to earlier. Models for the design and operation of supply chain networks may be steady state or dynamic and may be deterministic or deal with uncertainties (particularly in product demands). Research in this field started very early on, with location-allocation problems forming part of the earlier set of “classical” operations research problems. The gap between the growing demand and available supply of high-quality, cost effective, and timely health care continues to be a daunting challenge not only in developing and underdeveloped countries, but also in developed countries. Further, the issues involved with the supply chain design in developing countries are prevalent in developed countries, especially with the rising number of uninsured and jobless among the patient populations and with the budget deficits. Thus the project is a sincere effort in simplifying the tasks of administrators in an easily usable format.

2.2 PROPOSED SYSTEM

While there has been no consensus on the definition of Pharmacy Supply Management in the literature, they have proposed that researchers adopt the below definition to allow for the coherent development of theory in the area. In order to have a successful supply management, we need to make many decisions related to the flow of information, product, and funds. Each decision should be made in a way to increase the whole supply chain profitability . Supply management is more complex in healthcare and other industries because of the impact on people’s health requiring adequate and accurate medical supply according to the patient’s need.

3. DATABASE DESIGN

3.1 CONCEPTUAL DESIGN

3.1.1 SCHEMAS WITH ATTRIBUTES

1. POSTS Table

- **Purpose:** Stores details about medical facilities or businesses involved in the pharmaceutical supply chain.

- **Attributes:**
 - **MID** (INT, Primary Key): Unique identifier for each medical entity.
 - **MEDICAL_NAME** (VARCHAR(255), NOT NULL): Name of the medical facility.
 - **OWNER_NAME** (VARCHAR(255)): Name of the owner of the medical facility.
 - **PHONE_NO** (VARCHAR(15)): Contact phone number of the facility.
 - **ADDRESS** (VARCHAR(255)): Address/location of the medical facility.
-

2. MEDICINES Table

- **Purpose:** Manages information about medicines and products offered by medical entities.
 - **Attributes:**
 - **MID** (INT, Primary Key, Foreign Key referencing POSTS(MID)): Links medicines to a specific medical entity.
 - **NAME** (VARCHAR(255), NOT NULL): Name of the medical facility or related entity.
 - **MEDICINES** (VARCHAR(255)): List or description of medicines offered.
 - **PRODUCTS** (VARCHAR(255)): List or description of additional products.
 - **EMAIL** (VARCHAR(255)): Contact email address.
 - **AMOUNT** (DECIMAL(10, 2)): Price or amount of products/medicines.
-

3. LOGS Table

- **Purpose:** Maintains records of actions or events for audit and monitoring purposes.
- **Attributes:**
 - **ID** (INT, Primary Key, NOT NULL): Unique identifier for each log entry.
 - **MID** (INT, Foreign Key referencing POSTS(MID)): Links the log entry to a specific medical entity.
 - **ACTION** (VARCHAR(255), NOT NULL): Description of the action performed.

- **LOG_DATE** (DATE, NOT NULL): Date of the action logged.
-

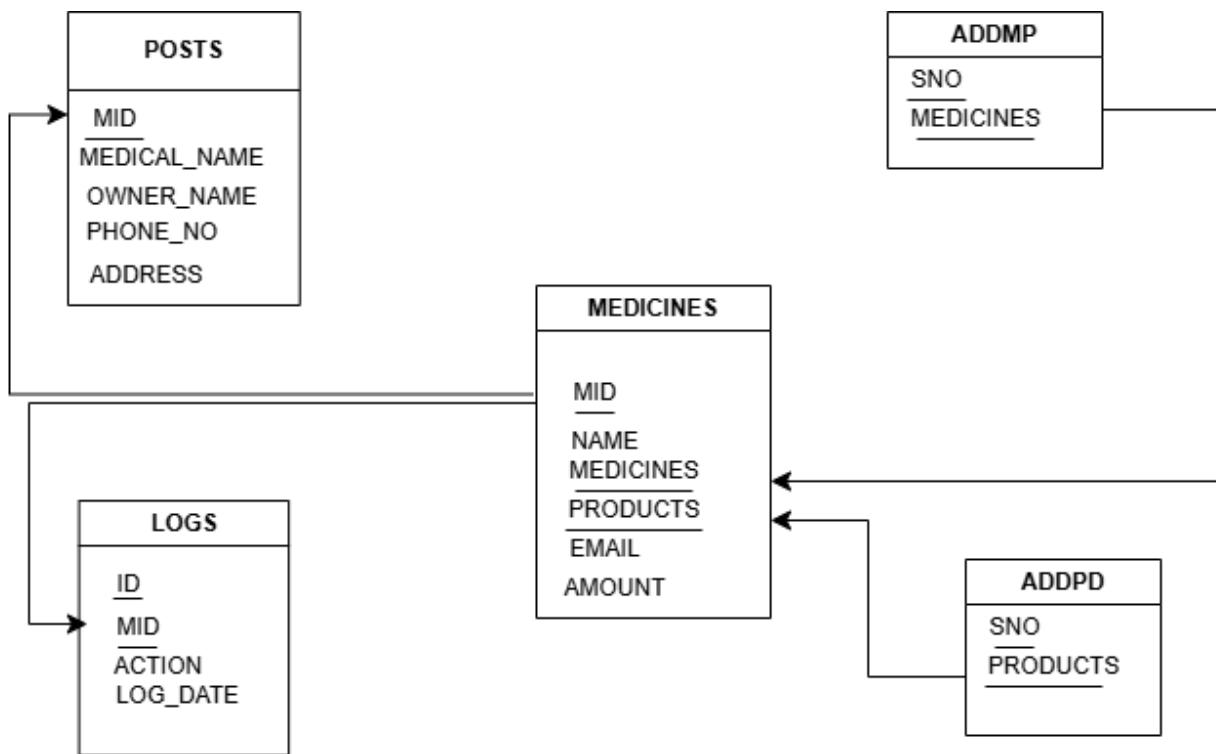
4. ADDMP Table

- **Purpose:** Stores additional information related to medicines.
 - **Attributes:**
 - **SNO** (INT, Primary Key, NOT NULL): Unique identifier for the entry.
 - **MEDICINES** (VARCHAR(255), NOT NULL): Description or details of additional medicines.
-

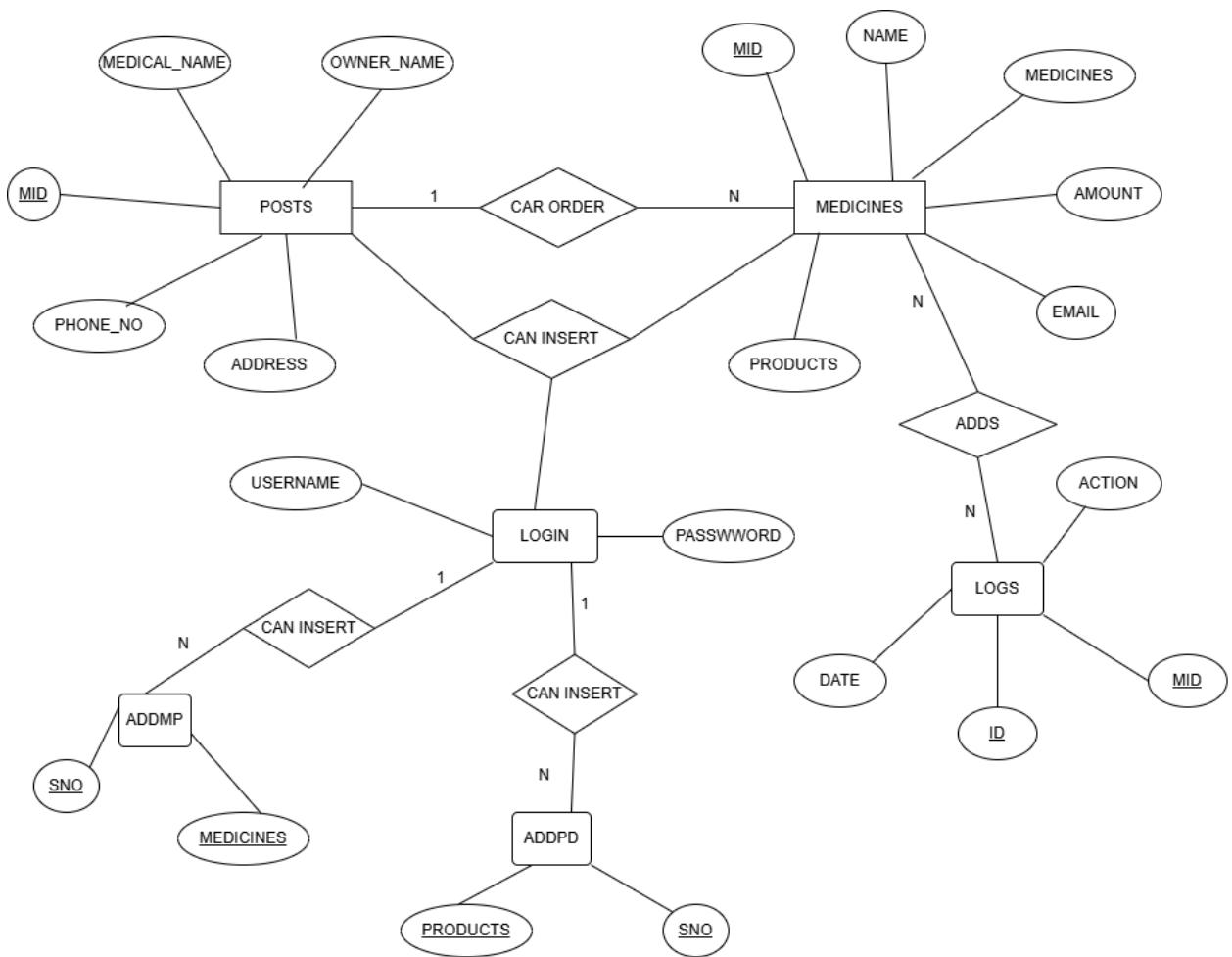
5. ADDPD Table

- **Purpose:** Stores additional information related to products.
- **Attributes:**
 - **SNO** (INT, Primary Key, NOT NULL): Unique identifier for the entry.
 - **PRODUCTS** (VARCHAR(255), NOT NULL): Description or details of additional products.

3.1.2 SCHEMA DIAGRAM :



3.1.3 ER DIAGRAM :



3.1.4 SNAPSHOTS OF ALL THE SCHEMAS :

01. POSTS

SQL Object Creation (DDL)

```
CREATE TABLE "POSTS"
(
    "MID" NUMBER(*,0),
    "MEDICAL_NAME" VARCHAR2(255) COLLATE "USING_NLS_COMP" NOT NULL ENABLE,
    "OWNER_NAME" VARCHAR2(255) COLLATE "USING_NLS_COMP",
    "PHONE_NO" VARCHAR2(15) COLLATE "USING_NLS_COMP",
    "ADDRESS" VARCHAR2(255) COLLATE "USING_NLS_COMP",
    PRIMARY KEY ("MID")
)
USING INDEX ENABLE
) DEFAULT COLLATION "USING_NLS_COMP"
/
```

02. MEDICINES

SQL Object Creation (DDL)

```
CREATE TABLE "MEDICINES"
(
    "MID" NUMBER(*,0),
    "NAME" VARCHAR2(255) COLLATE "USING_NLS_COMP" NOT NULL ENABLE,
    "MEDICINES" VARCHAR2(255) COLLATE "USING_NLS_COMP",
    "PRODUCTS" VARCHAR2(255) COLLATE "USING_NLS_COMP",
    "EMAIL" VARCHAR2(255) COLLATE "USING_NLS_COMP",
    "AMOUNT" NUMBER(10,2),
    PRIMARY KEY ("MID")
)
USING INDEX ENABLE
) DEFAULT COLLATION "USING_NLS_COMP"
/
ALTER TABLE "MEDICINES" ADD FOREIGN KEY ("MID")
    REFERENCES "POSTS" ("MID") ENABLE
/
```

03. LOGS

SQL Object Creation (DDL)

```
CREATE TABLE  "LOGS"
(   "ID" NUMBER(*,0) NOT NULL ENABLE,
    "MID" NUMBER(*,0),
    "ACTION" VARCHAR2(255) COLLATE "USING_NLS_COMP" NOT NULL ENABLE,
    "LOG_DATE" DATE NOT NULL ENABLE,
        PRIMARY KEY ("ID")
    USING INDEX  ENABLE
)  DEFAULT COLLATION "USING_NLS_COMP"
/
ALTER TABLE  "LOGS" ADD CONSTRAINT "FK_MID" FOREIGN KEY ("MID")
    REFERENCES  "POSTS" ("MID") ENABLE
/
```

04. ADDMP

SQL Object Creation (DDL)

```
CREATE TABLE  "ADDMP"
(   "SNO" NUMBER(*,0) NOT NULL ENABLE,
    "MEDICINES" VARCHAR2(255) COLLATE "USING_NLS_COMP" NOT NULL ENABLE,
        PRIMARY KEY ("SNO")
    USING INDEX  ENABLE
)  DEFAULT COLLATION "USING_NLS_COMP"
/
```

05. ADDPD

SQL Object Creation (DDL)

```
CREATE TABLE "ADDPD"
(
    "SNO" NUMBER(*,0) NOT NULL ENABLE,
    "PRODUCTS" VARCHAR2(255) COLLATE "USING_NLS_COMP" NOT NULL ENABLE,
    PRIMARY KEY ("SNO")
)
USING INDEX ENABLE
) DEFAULT COLLATION "USING_NLS_COMP"
/
```

3.1.5 SNAPSHOTS OF THE INSTANCES

01. POSTS

MID	MEDICAL_NAME	OWNER_NAME	PHONE_NO	ADDRESS
101	City Health Pharmacy	Dr. Rahim Hossain	01712345678	25/A Dhanmondi, Dhaka
102	Green Life Pharmacy	Arifur Rahman	01898765432	3rd Floor, Green Life Hospital, Dhaka
103	Medico Mart	Shamim Ahmed	01923456789	Chittagong Road, Narayanganj
104	Apollo Drug Store	Dr. Farhana Sultana	01612345001	House #7, Gulshan-2, Dhaka
105	Lifeline Pharmacy	Nahidul Karim	01700987654	Kumira, Chittagong
106	Delta Pharma Plus	Sabina Yasmin	01567890123	Station Road, Sylhet
107	HealthHub Pharmacy	Mahmudul Hasan	01811223344	Kawran Bazar, Dhaka
108	Cure & Care Pharmacy	Abu Taher	01755667788	Rajshahi College Road, Rajshahi
109	EverCare Pharmacy	Dr. Nusrat Jahan	01412349876	Uttara Sector 10, Dhaka
110	Better Health Center	Jahidul Islam	01955667799	Khulna Medical College Area, Khulna

02. MEDICINES

MID	NAME	MEDICINES	PRODUCTS	EMAIL	AMOUNT
101	City Health Pharmacy	Paracetamol, Ibuprofen, Amoxicillin	Painkillers, Antibiotics	cityhealth@pharmacy.com	15000.5
102	Green Life Pharmacy	Cetirizine, Metformin, Salbutamol	Antihistamines, Diabetic Medicines	greenlife@pharmacy.com	20000.75
103	Medico Mart	Omeprazole, Ranitidine, Vitamin C	Acidity Relief, Supplements	medicomart@pharma.com	18000
104	Apollo Drug Store	Aspirin, Azithromycin, Calcium Tablets	Antibiotics, Supplements	apollo@drugstore.com	22000.25
105	Lifeline Pharmacy	Losartan, Atorvastatin, Zinc Tablets	Blood Pressure, Cholesterol, Supplements	lifeline@pharma.com	17000
106	Delta Pharma Plus	Dexamethasone, Metronidazole, Iron Tablets	Steroids, Antibiotics, Supplements	delta@pharma.com	16000.5
107	HealthHub Pharmacy	Ceftriaxone, Loratadine, Multivitamins	Antibiotics, Antihistamines, Supplements	healthhub@pharma.com	25000
108	Cure & Care Pharmacy	Clopidogrel, Glimepiride, Folic Acid	Cardiac Medicines, Supplements	curecare@pharma.com	19000
109	EverCare Pharmacy	Hydroxychloroquine, Montelukast, Vitamin D	Immune Boosters, Respiratory Relief	evercare@pharmacy.com	21000
110	Better Health Center	Insulin, Probiotics, Electrolytes	Diabetic Supplies, Digestive Care	betterhealth@pharma.com	23000

03. LOGS

ID	MID	ACTION	LOG_DATE
1	101	Stock Updated	01-JAN-25
2	102	New Medicines Added	03-JAN-25
3	103	Medicine Sold	05-JAN-25
4	104	Low Stock Alert	07-JAN-25
5	105	Inventory Audit	09-JAN-25
6	106	Customer Feedback Received	10-JAN-25
7	107	Online Order Fulfilled	12-JAN-25
8	108	Medicine Expired	13-JAN-25
9	109	New Staff Assigned	15-JAN-25
10	110	System Maintenance	17-JAN-25

04. ADDMP

SNO	MEDICINES
1	Paracetamol
2	Ibuprofen
3	Amoxicillin
4	Cetirizine
5	Metformin
6	Omeprazole
7	Ranitidine
8	Azithromycin
9	Losartan
10	Insulin

05. ADDPD

SNO	PRODUCTS
1	Painkillers
2	Antibiotics
3	Supplements
4	Antihistamines
5	Diabetic Medicines
6	Acidity Relief
7	Blood Pressure Control
8	Cholesterol Medicines
9	Cardiac Medicines
10	Digestive Care

3.2 Query PART

3.2.1 QUERY STATEMENT, RELATIONAL ALGEBRA, SQL :

01. Find all pharmacy names and corresponding medicines using a NATURAL JOIN.

$\pi_{\{\text{MEDICAL_NAME}, \text{MEDICINES}\}} (\text{POSTS} \bowtie \text{MEDICINES})$

```
SELECT MEDICAL_NAME, MEDICINES  
FROM POSTS  
NATURAL JOIN MEDICINES;
```

MEDICAL_NAME	MEDICINES
City Health Pharmacy	Paracetamol, Ibuprofen, Amoxicillin
Green Life Pharmacy	Cetirizine, Metformin, Salbutamol
Medico Mart	Omeprazole, Ranitidine, Vitamin C
Apollo Drug Store	Aspirin, Azithromycin, Calcium Tablets
Lifeline Pharmacy	Losartan, Atorvastatin, Zinc Tablets
Delta Pharma Plus	Dexamethasone, Metronidazole, Iron Tablets
HealthHub Pharmacy	Ceftriaxone, Loratadine, Multivitamins
Cure & Care Pharmacy	Clopidogrel, Glimepiride, Folic Acid
EverCare Pharmacy	Hydroxychloroquine, Montelukast, Vitamin D
Better Health Center	Insulin, Probiotics, Electrolytes

02. Get all possible combinations of pharmacies and logs using a CROSS JOIN.

$\pi_{\{POSTS.MEDICAL_NAME, LOGS.ACTION, LOGS.LOG_DATE\}} (POSTS \times LOGS)$

```
SELECT POSTS.MEDICAL_NAME, LOGS.ACTION, LOGS.LOG_DATE  
FROM POSTS  
CROSS JOIN LOGS;
```

MEDICAL_NAME	ACTION	LOG_DATE
City Health Pharmacy	Stock Updated	01-JAN-25
Green Life Pharmacy	Stock Updated	01-JAN-25
Medico Mart	Stock Updated	01-JAN-25
Apollo Drug Store	Stock Updated	01-JAN-25
Lifeline Pharmacy	Stock Updated	01-JAN-25
Delta Pharma Plus	Stock Updated	01-JAN-25
HealthHub Pharmacy	Stock Updated	01-JAN-25
Cure & Care Pharmacy	Stock Updated	01-JAN-25
EverCare Pharmacy	Stock Updated	01-JAN-25
Better Health Center	Stock Updated	01-JAN-25

City Health Pharmacy	New Medicines Added	03-JAN-25
Green Life Pharmacy	New Medicines Added	03-JAN-25
Medico Mart	New Medicines Added	03-JAN-25
Apollo Drug Store	New Medicines Added	03-JAN-25
Lifeline Pharmacy	New Medicines Added	03-JAN-25
Delta Pharma Plus	New Medicines Added	03-JAN-25
HealthHub Pharmacy	New Medicines Added	03-JAN-25
Cure & Care Pharmacy	New Medicines Added	03-JAN-25
EverCare Pharmacy	New Medicines Added	03-JAN-25
Better Health Center	New Medicines Added	03-JAN-25
City Health Pharmacy	Medicine Sold	05-JAN-25
Green Life Pharmacy	Medicine Sold	05-JAN-25

03.List all pharmacies and their medicines, even if some pharmacies have no medicines listed.

**π_{POSTS.MEDICAL_NAME, MEDICINES.MEDICINES} (POSTS
⤷_{POSTS.MID = MEDICINES.MID} MEDICINES)**

```

SELECT POSTS.MEDICAL_NAME, MEDICINES.MEDICINES
FROM POSTS
LEFT OUTER JOIN MEDICINES ON POSTS.MID = MEDICINES.MID;

```

MEDICAL_NAME	MEDICINES
City Health Pharmacy	Paracetamol, Ibuprofen, Amoxicillin
Green Life Pharmacy	Cetirizine, Metformin, Salbutamol
Medico Mart	Omeprazole, Ranitidine, Vitamin C
Apollo Drug Store	Aspirin, Azithromycin, Calcium Tablets
Lifeline Pharmacy	Losartan, Atorvastatin, Zinc Tablets
Delta Pharma Plus	Dexamethasone, Metronidazole, Iron Tablets
HealthHub Pharmacy	Ceftriaxone, Loratadine, Multivitamins
Cure & Care Pharmacy	Clopidogrel, Glimepiride, Folic Acid
EverCare Pharmacy	Hydroxychloroquine, Montelukast, Vitamin D
Better Health Center	Insulin, Probiotics, Electrolytes

04. Find all pharmacies and the medicines they provide using JOIN with USING.

$\pi_{\{MEDICAL_NAME, MEDICINES\}} (POSTS \bowtie_{\{MID\}} MEDICINES)$

SELECT MEDICAL_NAME, MEDICINES
 FROM POSTS
 JOIN MEDICINES USING (MID);

MEDICAL_NAME	MEDICINES
City Health Pharmacy	Paracetamol, Ibuprofen, Amoxicillin
Green Life Pharmacy	Cetirizine, Metformin, Salbutamol
Medico Mart	Omeprazole, Ranitidine, Vitamin C
Apollo Drug Store	Aspirin, Azithromycin, Calcium Tablets
Lifeline Pharmacy	Losartan, Atorvastatin, Zinc Tablets
Delta Pharma Plus	Dexamethasone, Metronidazole, Iron Tablets
HealthHub Pharmacy	Ceftriaxone, Loratadine, Multivitamins
Cure & Care Pharmacy	Clopidogrel, Glimepiride, Folic Acid
EverCare Pharmacy	Hydroxychloroquine, Montelukast, Vitamin D
Better Health Center	Insulin, Probiotics, Electrolytes

05. Find pharmacies that sell at least one medicine containing "Vitamin" using EXISTS

$\pi_{\{MEDICAL_NAME\}} (POSTS \bowtie_{\{POSTS.MID = MEDICINES.MID \wedge MEDICINES LIKE \%Vitamin\%}} MEDICINES)$

```
SELECT MEDICAL_NAME
FROM POSTS
WHERE EXISTS (
    SELECT 1
    FROM MEDICINES
    WHERE MEDICINES.MID = POSTS.MID
    AND MEDICINES LIKE '%Vitamin%'
);

```

MEDICAL_NAME
Medico Mart
EverCare Pharmacy

06. Find pharmacies where all medicines belong to the "Antibiotics" category (using ALL).

$\pi_{\{MEDICAL_NAME\}} (POSTS \bowtie_{\{MID\}} (\pi_{\{MID\}} (\sigma_{\{PRODUCTS = 'Antibiotics'\}} (MEDICINES)))) POSTS)$

```
SELECT MEDICAL_NAME
FROM POSTS
WHERE MID = ALL (
    SELECT MID
    FROM MEDICINES
    WHERE PRODUCTS = 'Antibiotics'
);

```

MEDICAL_NAME

City Health Pharmacy

Green Life Pharmacy

Medico Mart

Apollo Drug Store

Lifeline Pharmacy

Delta Pharma Plus

HealthHub Pharmacy

Cure & Care Pharmacy

EverCare Pharmacy

Better Health Center

07. Find pharmacies that sell at least one medicine from the ADDMP table (using ANY).

$\pi_{\{\text{MEDICAL_NAME}\}} (\text{POSTS} \bowtie_{\{\text{MID} = \pi_{\{\text{MID}\}} (\text{MEDICINES} \bowtie_{\{\text{MEDICINES} = \pi_{\{\text{MEDICINES}\}} (\text{ADDMP})\}} \text{ADDMP})\}} \text{MEDICINES})$

```
SELECT MEDICAL_NAME
FROM POSTS
WHERE MID = ANY (
    SELECT MID
    FROM MEDICINES
    WHERE MEDICINES IN (SELECT MEDICINES FROM ADDMP)
);
```

no data found

08. Find all pharmacies whose email domain is "pharma.com" using string functions.

$\pi_{\{\text{NAME, EMAIL}\}} (\sigma_{\{\text{EMAIL LIKE } \%@\text{pharma.com}'\}} (\text{MEDICINES}))$

```
SELECT NAME, EMAIL
FROM MEDICINES
WHERE EMAIL LIKE '%@pharma.com';
```

NAME	EMAIL
Medico Mart	medicomart@pharma.com
Lifeline Pharmacy	lifeline@pharma.com
Delta Pharma Plus	delta@pharma.com
HealthHub Pharmacy	healthhub@pharma.com
Cure & Care Pharmacy	curecare@pharma.com
Better Health Center	betterhealth@pharma.com

09. Retrieve total stock value per pharmacy, sorted in descending order.

$\tau_{\{\text{TOTAL_STOCK DESC}\}} (\rho_{\{\text{TOTAL_STOCK}/\text{SUM}_{\{\text{AMOUNT}\}}\}} (\gamma_{\{\text{NAME}, \text{SUM}_{\{\text{AMOUNT}\}}\}} (\text{MEDICINES})))$

```
SELECT NAME, SUM(AMOUNT) AS TOTAL_STOCK
FROM MEDICINES
GROUP BY NAME
ORDER BY TOTAL_STOCK DESC;
```

NAME	TOTAL_STOCK
HealthHub Pharmacy	25000
Better Health Center	23000
Apollo Drug Store	22000.25
EverCare Pharmacy	21000
Green Life Pharmacy	20000.75
Cure & Care Pharmacy	19000
Medico Mart	18000
Lifeline Pharmacy	17000
Delta Pharma Plus	16000.5
City Health Pharmacy	15000.5

10. Retrieve the pharmacy with the highest stock value using a nested subquery in FROM clause.

```
π_{MEDICAL_NAME, MAX_AMOUNT} (σ_{rank = 1}
(p_{MAX_AMOUNT/AMOUNT, rank/rank(AMOUNT DESC)} (POSTS
◁_{POSTS.MID = MEDICINES.MID} MEDICINES)))
```

```
SELECT MEDICAL_NAME, MAX_AMOUNT
FROM (
    SELECT MEDICAL_NAME, AMOUNT AS MAX_AMOUNT
    FROM POSTS
    JOIN MEDICINES ON POSTS.MID = MEDICINES.MID
) AS TEMP
ORDER BY MAX_AMOUNT DESC
LIMIT 1;
```

MEDICAL_NAME	MAX_AMOUNT
HealthHub Pharmacy	25000

11. Find pharmacies that sell both antibiotics and painkillers using INTERSECT

```
π_{NAME} (σ_{PRODUCTS LIKE '%Antibiotics%'} (MEDICINES)) ∩
π_{NAME} (σ_{PRODUCTS LIKE '%Painkillers%'} (MEDICINES))
```

```
SELECT NAME FROM MEDICINES WHERE PRODUCTS LIKE '%Antibiotics%'
INTERSECT
SELECT NAME FROM MEDICINES WHERE PRODUCTS LIKE '%Painkillers%';
```

NAME
City Health Pharmacy

12. Use the WITH clause to retrieve the total amount for each pharmacy.

```
T_{TotalStock DESC} (p_{TotalStock/SUM_{AMOUNT}} (γ_{NAME,
SUM_{AMOUNT}} (MEDICINES)))
```

```
WITH PharmacyStock AS (
    SELECT NAME, SUM(AMOUNT) AS TotalStock
    FROM MEDICINES
    GROUP BY NAME
)
SELECT * FROM PharmacyStock ORDER BY TotalStock DESC;
```

NAME	TOTAL STOCK
HealthHub Pharmacy	25000
Better Health Center	23000
Apollo Drug Store	22000.25
EverCare Pharmacy	21000
Green Life Pharmacy	20000.75
Cure & Care Pharmacy	19000
Medico Mart	18000
Lifeline Pharmacy	17000
Delta Pharma Plus	16000.5
City Health Pharmacy	15000.5

13. Update the phone number of "City Health Pharmacy".

**($\sigma_{\{\text{MEDICAL_NAME} \neq \text{'City Health Pharmacy'}\}}(\text{POSTS}) \cup$
 $\sigma_{\{\text{MEDICAL_NAME} = \text{'City Health Pharmacy'}\}}$
 $\rho_{\{\text{PHONE_NO}/'01799998888'\}}(\text{POSTS}))$**

UPDATE POSTS

SET PHONE_NO = '01799998888'
WHERE MEDICAL_NAME = 'City Health Pharmacy';

MID	MEDICAL_NAME	OWNER_NAME	PHONE_NO	ADDRESS
101	City Health Pharmacy	Dr. Rahim Hossain	01799998888	25/A Dhanmondi, Dhaka
102	Green Life Pharmacy	Arifur Rahman	01898765432	3rd Floor, Green Life Hospital, Dhaka
103	Medico Mart	Shamim Ahmed	01923456789	Chittagong Road, Narayanganj
104	Apollo Drug Store	Dr. Farhana Sultana	01612345001	House #7, Gulshan-2, Dhaka
105	Lifeline Pharmacy	Nahidul Karim	01700987654	Kumira, Chittagong
106	Delta Pharma Plus	Sabina Yasmin	01567890123	Station Road, Sylhet
107	HealthHub Pharmacy	Mahmudul Hasan	01811223344	Kawran Bazar, Dhaka
108	Cure & Care Pharmacy	Abu Taher	01755667788	Rajshahi College Road, Rajshahi
109	EverCare Pharmacy	Dr. Nusrat Jahan	01412349876	Uttara Sector 10, Dhaka
110	Better Health Center	Jahidul Islam	01955667799	Khulna Medical College Area, Khulna

14. Find the average stock value of pharmacies using aggregate function AVG

$\rho_{\{\text{AVERAGE_STOCK}/\text{AVG}_{\{\text{AMOUNT}\}}\}}(\gamma_{\{\text{AVG}_{\{\text{AMOUNT}\}}\}}(\text{MEDICINES}))$

```
SELECT AVG(AMOUNT) AS AVERAGE_STOCK  
FROM MEDICINES;
```

AVERAGE_STOCK
19600.2

15. Delete logs that are older than '2025-01-05'

$\sigma_{\{\text{LOG_DATE} \geq \text{TO_DATE('2025-01-05', 'YYYY-MM-DD')\}}$ (LOGS)

```
DELETE FROM LOGS  
WHERE LOG_DATE < TO_DATE('2025-01-05', 'YYYY-MM-DD');
```

2 row(s) deleted.

ID	MID	ACTION	LOG_DATE
3	103	Medicine Sold	05-JAN-25
4	104	Low Stock Alert	07-JAN-25
5	105	Inventory Audit	09-JAN-25
6	106	Customer Feedback Received	10-JAN-25
7	107	Online Order Fulfilled	12-JAN-25
8	108	Medicine Expired	13-JAN-25
9	109	New Staff Assigned	15-JAN-25
10	110	System Maintenance	17-JAN-25

16. Retrieve the total stock value (**AMOUNT**) of each pharmacy, but only for those pharmacies with a total stock value greater than 15,000.

T_{TOTAL_STOCK DESC} (σ_{TOTAL_STOCK > 15000} (ρ_{TOTAL_STOCK/SUM_{AMOUNT}} (γ_{MEDICAL_NAME, SUM_{AMOUNT}} (MEDICINES ⋈_{MEDICINES.MID = POSTS.MID} POSTS))))

```
SELECT MEDICAL_NAME, SUM(AMOUNT) AS TOTAL_STOCK
FROM MEDICINES
JOIN POSTS ON MEDICINES.MID = POSTS.MID
GROUP BY MEDICAL_NAME
HAVING SUM(AMOUNT) > 15000
ORDER BY TOTAL_STOCK DESC;
```

MEDICAL_NAME	TOTAL_STOCK
HealthHub Pharmacy	25000
Better Health Center	23000
Apollo Drug Store	22000.25
EverCare Pharmacy	21000
Green Life Pharmacy	20000.75
Cure & Care Pharmacy	19000
Medico Mart	18000
Lifeline Pharmacy	17000
Delta Pharma Plus	16000.5
City Health Pharmacy	15000.5

3.2.2 VIEWS PART

Create view for all Query

01.

```
CREATE VIEW Medical_Medicines_View AS  
SELECT MEDICAL_NAME, MEDICINES  
FROM POSTS  
NATURAL JOIN MEDICINES;
```

```
SELECT * FROM Medical_Medicines_View;
```

MEDICAL_NAME	MEDICINES
City Health Pharmacy	Paracetamol, Ibuprofen, Amoxicillin
Green Life Pharmacy	Cetirizine, Metformin, Salbutamol
Medico Mart	Omeprazole, Ranitidine, Vitamin C
Apollo Drug Store	Aspirin, Azithromycin, Calcium Tablets
Lifeline Pharmacy	Losartan, Atorvastatin, Zinc Tablets
Delta Pharma Plus	Dexamethasone, Metronidazole, Iron Tablets
HealthHub Pharmacy	Ceftriaxone, Loratadine, Multivitamins
Cure & Care Pharmacy	Clopidogrel, Glimepiride, Folic Acid
EverCare Pharmacy	Hydroxychloroquine, Montelukast, Vitamin D
Better Health Center	Insulin, Probiotics, Electrolytes

02.

```
CREATE VIEW Medical_Logs_View AS  
SELECT POSTS.MEDICAL_NAME, LOGS.ACTION, LOGS.LOG_DATE  
FROM POSTS  
CROSS JOIN LOGS;
```

```
SELECT * FROM Medical_Logs_View;
```

MEDICAL_NAME	ACTION	LOG_DATE
City Health Pharmacy	Stock Updated	01-JAN-25
Green Life Pharmacy	Stock Updated	01-JAN-25
Medico Mart	Stock Updated	01-JAN-25
Apollo Drug Store	Stock Updated	01-JAN-25
Lifeline Pharmacy	Stock Updated	01-JAN-25
Delta Pharma Plus	Stock Updated	01-JAN-25
HealthHub Pharmacy	Stock Updated	01-JAN-25
Cure & Care Pharmacy	Stock Updated	01-JAN-25
EverCare Pharmacy	Stock Updated	01-JAN-25
Better Health Center	Stock Updated	01-JAN-25

City Health Pharmacy	New Medicines Added	03-JAN-25
Green Life Pharmacy	New Medicines Added	03-JAN-25
Medico Mart	New Medicines Added	03-JAN-25
Apollo Drug Store	New Medicines Added	03-JAN-25
Lifeline Pharmacy	New Medicines Added	03-JAN-25
Delta Pharma Plus	New Medicines Added	03-JAN-25
HealthHub Pharmacy	New Medicines Added	03-JAN-25
Cure & Care Pharmacy	New Medicines Added	03-JAN-25
EverCare Pharmacy	New Medicines Added	03-JAN-25
Better Health Center	New Medicines Added	03-JAN-25
City Health Pharmacy	Medicine Sold	05-JAN-25
Green Life Pharmacy	Medicine Sold	05-JAN-25

03.

```

CREATE VIEW Medical_Medicines_Outer_View AS
SELECT POSTS.MEDICAL_NAME, MEDICINES.MEDICINES
FROM POSTS
LEFT OUTER JOIN MEDICINES ON POSTS.MID = MEDICINES.MID;

SELECT * FROM Medical_Medicines_Outer_View;

```

MEDICAL_NAME	MEDICINES
City Health Pharmacy	Paracetamol, Ibuprofen, Amoxicillin
Green Life Pharmacy	Cetirizine, Metformin, Salbutamol
Medico Mart	Omeprazole, Ranitidine, Vitamin C
Apollo Drug Store	Aspirin, Azithromycin, Calcium Tablets
Lifeline Pharmacy	Losartan, Atorvastatin, Zinc Tablets
Delta Pharma Plus	Dexamethasone, Metronidazole, Iron Tablets
HealthHub Pharmacy	Ceftriaxone, Loratadine, Multivitamins
Cure & Care Pharmacy	Clopidogrel, Glimepiride, Folic Acid
EverCare Pharmacy	Hydroxychloroquine, Montelukast, Vitamin D
Better Health Center	Insulin, Probiotics, Electrolytes

04.

```
CREATE VIEW Medical_Medicines_Using_View AS
SELECT MEDICAL_NAME, MEDICINES
FROM POSTS
JOIN MEDICINES USING (MID);
```

```
SELECT * FROM Medical_Medicines_Using_View;
```

MEDICAL_NAME	MEDICINES
City Health Pharmacy	Paracetamol, Ibuprofen, Amoxicillin
Green Life Pharmacy	Cetirizine, Metformin, Salbutamol
Medico Mart	Omeprazole, Ranitidine, Vitamin C
Apollo Drug Store	Aspirin, Azithromycin, Calcium Tablets
Lifeline Pharmacy	Losartan, Atorvastatin, Zinc Tablets
Delta Pharma Plus	Dexamethasone, Metronidazole, Iron Tablets
HealthHub Pharmacy	Ceftriaxone, Loratadine, Multivitamins
Cure & Care Pharmacy	Clopidogrel, Glimepiride, Folic Acid
EverCare Pharmacy	Hydroxychloroquine, Montelukast, Vitamin D
Better Health Center	Insulin, Probiotics, Electrolytes

05.

```

CREATE VIEW Medical_With_Vitamins_View AS
SELECT MEDICAL_NAME
FROM POSTS
WHERE EXISTS (
    SELECT 1
    FROM MEDICINES
    WHERE MEDICINES.MID = POSTS.MID
    AND MEDICINES.MEDICINES LIKE '%Vitamin%'
);

```

```
SELECT * FROM Medical_With_Vitamins_View;
```

MEDICAL_NAME
Medico Mart
EverCare Pharmacy

06.

```
CREATE VIEW Medical_With_Antibiotics_View AS
SELECT MEDICAL_NAME
FROM POSTS
WHERE MID = ALL (
    SELECT MID
    FROM MEDICINES
    WHERE PRODUCTS = 'Antibiotics'
);
```

```
SELECT * FROM Medical_With_Antibiotics_View;
```

MEDICAL_NAME

City Health Pharmacy

Green Life Pharmacy

Medico Mart

Apollo Drug Store

Lifeline Pharmacy

Delta Pharma Plus

HealthHub Pharmacy

Cure & Care Pharmacy

EverCare Pharmacy

Better Health Center

07.

```
CREATE VIEW Medical_With_Specific_Medicines_View AS
SELECT MEDICAL_NAME
FROM POSTS
WHERE MID = ANY (
    SELECT MID
    FROM MEDICINES
    WHERE MEDICINES IN (SELECT MEDICINES FROM ADDMP)
);
```

```
SELECT * FROM Medical_With_Specific_Medicines_View;
```

no data found

08.

```
CREATE VIEW Medicines_With_Pharma_Email_View AS
SELECT NAME, EMAIL
FROM MEDICINES
WHERE EMAIL LIKE '%@pharma.com';
```

```
SELECT * FROM Medicines_With_Pharma_Email_View;
```

NAME	EMAIL
Medico Mart	medicomart@pharma.com
Lifeline Pharmacy	lifeline@pharma.com
Delta Pharma Plus	delta@pharma.com
HealthHub Pharmacy	healthhub@pharma.com
Cure & Care Pharmacy	curecare@pharma.com
Better Health Center	betterhealth@pharma.com

09.

```
CREATE VIEW Medicines_Total_Stock_View AS
SELECT NAME, SUM(AMOUNT) AS TOTAL_STOCK
FROM MEDICINES
GROUP BY NAME
ORDER BY TOTAL_STOCK DESC;
```

```
SELECT * FROM Medicines_Total_Stock_View;
```

NAME	TOTAL_STOCK
HealthHub Pharmacy	25000
Better Health Center	23000
Apollo Drug Store	22000.25
EverCare Pharmacy	21000
Green Life Pharmacy	20000.75
Cure & Care Pharmacy	19000
Medico Mart	18000
Lifeline Pharmacy	17000
Delta Pharma Plus	16000.5
City Health Pharmacy	15000.5

10.

```
CREATE OR REPLACE VIEW Top_Medical_Amount_View AS
SELECT MEDICAL_NAME, MAX(AMOUNT) AS MAX_AMOUNT
FROM POSTS
JOIN MEDICINES ON POSTS.MID = MEDICINES.MID
GROUP BY MEDICAL_NAME
ORDER BY MAX(AMOUNT) DESC
FETCH FIRST 1 ROWS ONLY;
```

```
SELECT * FROM Top_Medical_Amount_View;
```

MEDICAL_NAME	MAX_AMOUNT
HealthHub Pharmacy	25000

11.

```
CREATE VIEW Medicines_Antibiotics_And_Painkillers_View AS
SELECT NAME
FROM MEDICINES
WHERE PRODUCTS LIKE '%Antibiotics%'
INTERSECT
SELECT NAME
FROM MEDICINES
WHERE PRODUCTS LIKE '%Painkillers%';
```

```
SELECT * FROM Medicines_Antibiotics_And_Painkillers_View;
```

NAME
City Health Pharmacy

12.

```
CREATE VIEW Pharmacy_Stock_View AS
WITH PharmacyStock AS (
    SELECT NAME, SUM(AMOUNT) AS TotalStock
    FROM MEDICINES
    GROUP BY NAME
)
SELECT *
FROM PharmacyStock
ORDER BY TotalStock DESC;
```

```
SELECT * FROM Pharmacy_Stock_View;
```

NAME	TOTAL STOCK
HealthHub Pharmacy	25000
Better Health Center	23000
Apollo Drug Store	22000.25
EverCare Pharmacy	21000
Green Life Pharmacy	20000.75
Cure & Care Pharmacy	19000
Medico Mart	18000
Lifeline Pharmacy	17000
Delta Pharma Plus	16000.5
City Health Pharmacy	15000.5

13.

```
CREATE VIEW City_Health_Phone_View AS  
SELECT MEDICAL_NAME, PHONE_NO  
FROM POSTS  
WHERE MEDICAL_NAME = 'City Health Pharmacy';
```

```
UPDATE City_Health_Phone_View  
SET PHONE_NO = '01799998888';
```

```
SELECT * FROM City_Health_Phone_View;
```

MEDICAL_NAME	PHONE_NO
City Health Pharmacy	01712345678

14.

```
CREATE VIEW Average_Stock_View AS  
SELECT AVG(AMOUNT) AS AVERAGE_STOCK  
FROM MEDICINES;
```

```
SELECT * FROM Average_Stock_View;
```

AVERAGE_STOCK
19600.2

15.

```
CREATE VIEW Old_Logs_View AS
SELECT *
FROM LOGS
WHERE LOG_DATE < TO_DATE('2025-01-05', 'YYYY-MM-DD');
```

```
DELETE FROM LOGS
WHERE LOG_DATE IN (SELECT LOG_DATE FROM Old_Logs_View);

SELECT * FROM Old_Logs_View;
```

ID	MID	ACTION	LOG_DATE
3	103	Medicine Sold	05-JAN-25
4	104	Low Stock Alert	07-JAN-25
5	105	Inventory Audit	09-JAN-25
6	106	Customer Feedback Received	10-JAN-25
7	107	Online Order Fulfilled	12-JAN-25
8	108	Medicine Expired	13-JAN-25
9	109	New Staff Assigned	15-JAN-25
10	110	System Maintenance	17-JAN-25

16.

```
CREATE VIEW Medical_Stock_View AS
SELECT MEDICAL_NAME, SUM(AMOUNT) AS TOTAL_STOCK
FROM MEDICINES
JOIN POSTS ON MEDICINES.MID = POSTS.MID
GROUP BY MEDICAL_NAME
HAVING SUM(AMOUNT) > 15000
ORDER BY TOTAL_STOCK DESC;

SELECT * FROM Medical_Stock_View;
```

MEDICAL_NAME	TOTAL_STOCK
HealthHub Pharmacy	25000
Better Health Center	23000
Apollo Drug Store	22000.25
EverCare Pharmacy	21000
Green Life Pharmacy	20000.75
Cure & Care Pharmacy	19000
Medico Mart	18000
Lifeline Pharmacy	17000
Delta Pharma Plus	16000.5
City Health Pharmacy	15000.5

3.2.3 FUNCTIONAL DEPENDENCIES & NORMAL FORM

In order to determine if the schemas are in the desired normal forms (1NF, 2NF, 3NF, and BCNF), we first need to identify the **functional dependencies (FDs)** for the given database schema and then prove the normal forms.

1. Identify the Functional Dependencies (FDs)

FDs for **POSTS** Table:

The **POSTS** table has the following attributes:

- **MID** (primary key)
- **MEDICAL_NAME**
- **OWNER_NAME**
- **PHONE_NO**
- **ADDRESS**

Functional Dependencies:

- $\text{MID} \rightarrow \text{MEDICAL_NAME}, \text{ OWNER_NAME}, \text{ PHONE_NO}, \text{ ADDRESS}$

This is because the **MID** uniquely identifies each pharmacy, and therefore, determines all the other attributes.

FDs for **MEDICINES** Table:

The **MEDICINES** table has the following attributes:

- **MID** (foreign key from **POSTS**)
- **NAME**
- **MEDICINES**
- **PRODUCTS**
- **EMAIL**
- **AMOUNT**

Functional Dependencies:

- $\text{MID}, \text{NAME} \rightarrow \text{MEDICINES}, \text{PRODUCTS}, \text{EMAIL}, \text{AMOUNT}$

This is because the combination of **MID** and **NAME** uniquely identifies each medicine entry in the **MEDICINES** table, and hence, determines all other attributes.

FDs for LOGS Table:

The **LOGS** table has the following attributes:

- **ID** (primary key)
- **MID** (foreign key from **POSTS**)
- **ACTION**
- **LOG_DATE**

Functional Dependencies:

- $\text{ID} \rightarrow \text{MID}, \text{ACTION}, \text{LOG_DATE}$

Since **ID** is the primary key, it uniquely identifies each log entry, thus determining all other attributes in the table.

FDs for ADDMP Table:

The **ADDMP** table has the following attributes:

- **SNO** (primary key)
- **MEDICINES**

Functional Dependencies:

- $\text{SNO} \rightarrow \text{MEDICINES}$

Since **SNO** is the primary key, it uniquely identifies each record in the table and determines the **MEDICINES** attribute.

FDs for ADDPD Table:

The **ADDPD** table has the following attributes:

- **SNO** (primary key)
- **PRODUCTS**

Functional Dependencies:

- $\text{SNO} \rightarrow \text{PRODUCTS}$

Since **SNO** is the primary key, it uniquely identifies each record in the table and determines the **PRODUCTS** attribute.

2. Proving Normal Forms

First Normal Form (1NF):

A table is in **1NF** if all the columns contain atomic values (no repeating groups or arrays).

Proving 1NF for each table:

- **POSTS**: All columns contain atomic values like **MID**, **MEDICAL_NAME**, **OWNER_NAME**, etc.
- **MEDICINES**: All columns contain atomic values like **MID**, **NAME**, **MEDICINES**, **PRODUCTS**, etc.
- **LOGS**: All columns contain atomic values like **ID**, **MID**, **ACTION**, **LOG_DATE**.
- **ADDMP**: All columns contain atomic values like **SNO**, **MEDICINES**.
- **ADDPD**: All columns contain atomic values like **SNO**, **PRODUCTS**.

Conclusion: All the tables are in **1NF**.

Second Normal Form (2NF):

A table is in **2NF** if:

1. It is in **1NF**.
2. There are no partial dependencies, i.e., no non-prime attributes depend on a part of the primary key.

Proving 2NF:

- **POSTS**: The primary key is **MID**, and all non-prime attributes (**MEDICAL_NAME**, **OWNER_NAME**, **PHONE_NO**, **ADDRESS**) depend on **MID**, so no partial dependency exists.
- **MEDICINES**: The primary key is the combination of **MID** and **NAME**. All non-prime attributes (**MEDICINES**, **PRODUCTS**, **EMAIL**, **AMOUNT**) depend on the whole primary key (**MID**, **NAME**), so no partial dependency exists.
- **LOGS**: The primary key is **ID**, and all non-prime attributes (**MID**, **ACTION**, **LOG_DATE**) depend on **ID**, so no partial dependency exists.
- **ADDMP**: The primary key is **SNO**, and the non-prime attribute (**MEDICINES**) depends on **SNO**, so no partial dependency exists.
- **ADDPD**: The primary key is **SNO**, and the non-prime attribute (**PRODUCTS**) depends on **SNO**, so no partial dependency exists.

Conclusion: All tables are in **2NF**.

Third Normal Form (3NF):

A table is in **3NF** if:

1. It is in **2NF**.
2. There are no transitive dependencies, i.e., no non-prime attributes depend on other non-prime attributes.

Proving 3NF:

- **POSTS**: There are no transitive dependencies because all attributes depend directly on the primary key **MID**.
- **MEDICINES**: There are no transitive dependencies because all non-prime attributes depend directly on the primary key (**MID**, **NAME**).
- **LOGS**: There are no transitive dependencies because all non-prime attributes depend directly on the primary key **ID**.
- **ADDMP**: There are no transitive dependencies because all non-prime attributes depend directly on the primary key **SNO**.
- **ADDPD**: There are no transitive dependencies because all non-prime attributes depend directly on the primary key **SNO**.

Conclusion: All tables are in **3NF**.

Boyce-Codd Normal Form (BCNF):

A table is in **BCNF** if:

1. It is in **3NF**.
2. Every functional dependency $X \rightarrow Y$, where X is a superkey.

Proving BCNF:

- **POSTS:** $MID \rightarrow MEDICAL_NAME, OWNER_NAME, PHONE_NO, ADDRESS$. MID is a superkey, so it satisfies BCNF.
- **MEDICINES:** $MID, NAME \rightarrow MEDICINES, PRODUCTS, EMAIL, AMOUNT$. The combination of MID and $NAME$ is a superkey, so it satisfies BCNF.
- **LOGS:** $ID \rightarrow MID, ACTION, LOG_DATE$. ID is a superkey, so it satisfies BCNF.
- **ADDMP:** $SNO \rightarrow MEDICINES$. SNO is a superkey, so it satisfies BCNF.
- **ADDPD:** $SNO \rightarrow PRODUCTS$. SNO is a superkey, so it satisfies BCNF.

Conclusion: All tables are in **BCNF**.

Summary of Normal Forms:

1. **POSTS:** 1NF, 2NF, 3NF, BCNF
2. **MEDICINES:** 1NF, 2NF, 3NF, BCNF
3. **LOGS:** 1NF, 2NF, 3NF, BCNF
4. **ADDMP:** 1NF, 2NF, 3NF, BCNF
5. **ADDPD:** 1NF, 2NF, 3NF, BCNF

All tables are in **BCNF**, which is the highest normal form and satisfies the requirements for normalization.

4. SOFTWARE IMPLEMENTATION

4.1 SOFTWARE AND HARDWARE REQUIREMENTS :

SOFTWARE REQUIREMENTS:

Frontend- HTML, CSS, Java Script, Bootstrap
Backend-Python flask (Python 3.12.4) , SQL

- 1.Operating System: Windows 11
- 2.Google Chrome/Internet Explorer
- 3.Python main editor (user interface)
- 4.workspace editor

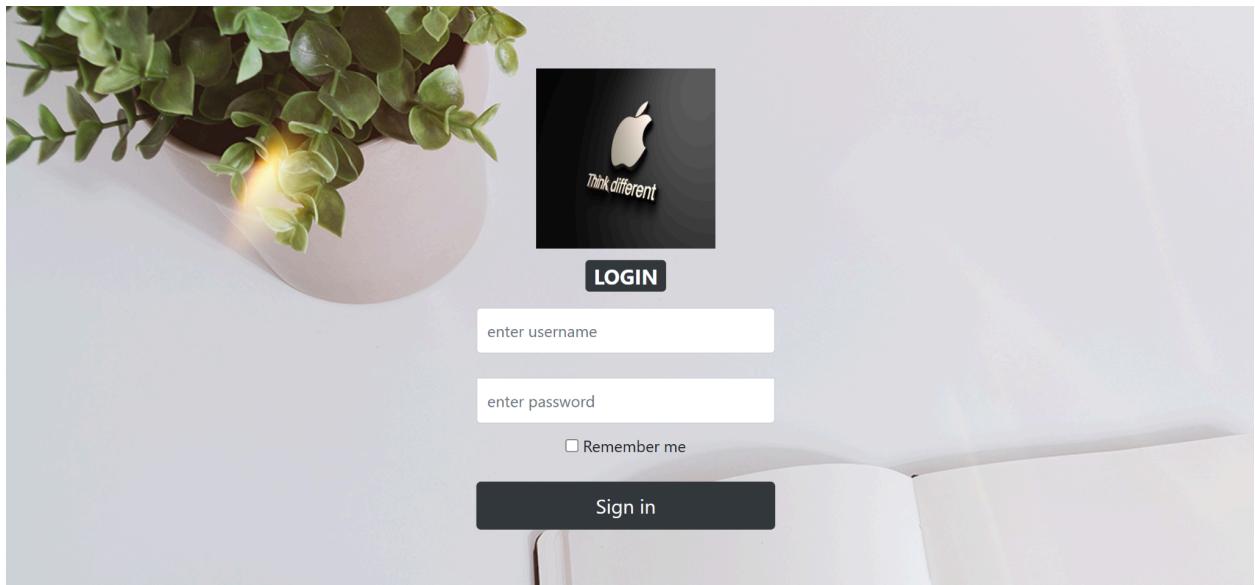
HARDWARE REQUIREMENTS:

1. Computer with a 1.1 GHz or faster processor
2. Minimum 2GB of RAM or more
3. 2.5 GB of available hard-disk space
4. 5400 RPM hard drive
5. 1366 × 768 or higher-resolution display

4.2 USER INTERFACES

4.2.1 SCREEN SHOTS

LOGIN PAGE:



A screenshot of a web browser showing the homepage of a Pharmacy Supply Management system. The title bar says "WELCOME" and the address bar shows "127.0.0.1:5000/login". The page features a background image of various prescription bottles and pills. Overlaid on the image is the text "PHARMACY SUPPLY MANAGEMENT" in large, bold, white capital letters, with "Medicines and Products" in smaller white text below it. At the top, there is a navigation menu with links: HOME, ADD MEDICAL INFORMATION, VIEW ORDERED LIST, ORDER MEDICINES/PRODUCTS, DETAILS, ADD/SEARCH ITEMS, ABOUT US, and LOGOUT. A blue banner at the bottom left says "You are Logged in" with a close button "X".

ADD MEDICINCES INFO:

welcome you are logged in!

WELCOME

HOME ADD MEDICAL INFORMATION VIEW ORDERED LIST ORDER MEDICINES/PRODUCTS DETAILS ADD/SEARCH ITEMS ABOUT US LOGOUT

ADD DATA

MEDICAL ID
4

MEDICAL SHOP NAME
arksa medicals

OWNER NAME
pritha

PHONE NUMBER
9986786453

ADDRESS
Bangalore|

INSERT DATA

Thanks for submitting your details

ADD DATA

enter medical id

enter medical name

Enter Owner name

Enter phone number

enter Address

INSERT DATA

MEDICAL RECORDS

medical management information stored over here

Mid	Medical Shop Name	Medical Shop Owner	Phone No	Address	Edit	Delete
1	national medical	akhil	9874563214	chickjala	EDIT	DELETE
2	params medical	Aadithyaa	9874563215	Bangalore	EDIT	DELETE
3	Indian medicals	Anees	7259462891	Bangalore	EDIT	DELETE
4	arksa medicals	pritha	9986786453	Bangalore	EDIT	DELETE

WELCOME

Want to get in touch? Fill out the form below to send me a message and I will get back to you as soon as possible!

mid
1

name
akhil

Medicines

glipizide-metformin (Metaglip)-[3 sheet]
glyburide (DiBeta, Glynase, Micronase)-[5 sheet]
glyburide-metformin (Glucovance)-[5 sheet]

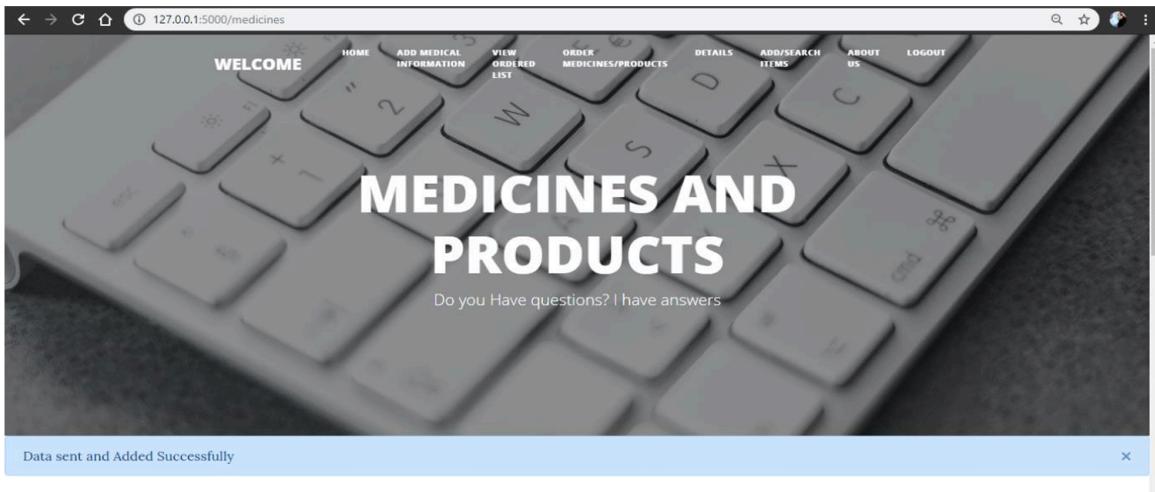
Products

lux soap-[5 piece]
oilay cream-[5 item]
patanjali alovera-[4 item]
garnier hair colour black-[1 dozen]

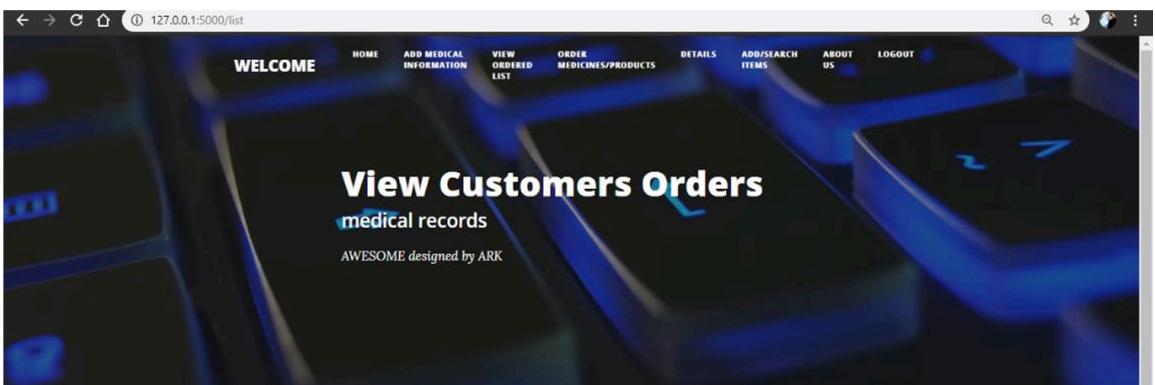
Email id
aneesurrehman423@gmail.com

Amount
78957

SEND



Want to get in touch? Fill out the form below to send me a message and I will get back to you as soon as possible!



medical management information stored over here

Mid	Medicines	Products	Amount	Delete
1	glimepiride (Amaryl)-[5 sheet] glimepiride-pioglitazone (Duetact)-[4 sheet] glimepiride-rosiglitazone (Avandaryl)-[5 sheet] gliclazide-[8 sheet] glipizide (Glucotrol)-[5 sheet] glipizide-metform	lux soap-[5 piece] olay cream-[5 item] patanjali alovera-[4 item] garnier hair colour black-[1 dozen] tresemme keratin smooth shampoo-[one dozen] garnier pimple facewash-[2 dozen]	78957	<button>DELETE</button>

Available items in our pharmacy.

Sno	Medicines
1	paracetamol
2	Dolo 650
3	bcomplex
4	nycip
5	aspirin
6	Acetaminophen
7	Adderall
8	Ativan
9	Amitriptyline
10	Amlodipine
11	Atorvastatin

Search the required record
life becomes easier when you stop lagging behind fake things

[MEDICINES LIST](#) [PRODUCTS LIST](#)

ADD NEW MEDICINES AND PRODUCTS

Medicines

Add Medicine

Products

Add Products

Available items in our pharamacy

Sno	Products
1	santoor soap
2	ponds cream
3	nivea skin care
4	evion
5	ponds cold cream
6	olay
7	lakme
8	maybelin newyork
9	lacto calamine
10	patanjali alovera
11	ayush
12	lotus whiteglow
13	blotique

← → C ⌂ ⓘ 127.0.0.1:5000/search

WELCOME

HOME ADD MEDICAL INFORMATION VIEW ORDERED LIST ORDER MEDICINES/PRODUCTS DETAILS ADD/SEARCH ITEMS ABOUT US LOGOUT

Search the required record

life becomes easier when you stop lagging behind fake things

MEDICINES LIST PRODUCTS LIST Acetaminophen SEARCH

ADD NEW MEDICINES AND PRODUCTS

Medicines

Add Medicine

← → ⌂ ⌂ ⓘ 127.0.0.1:5000/search

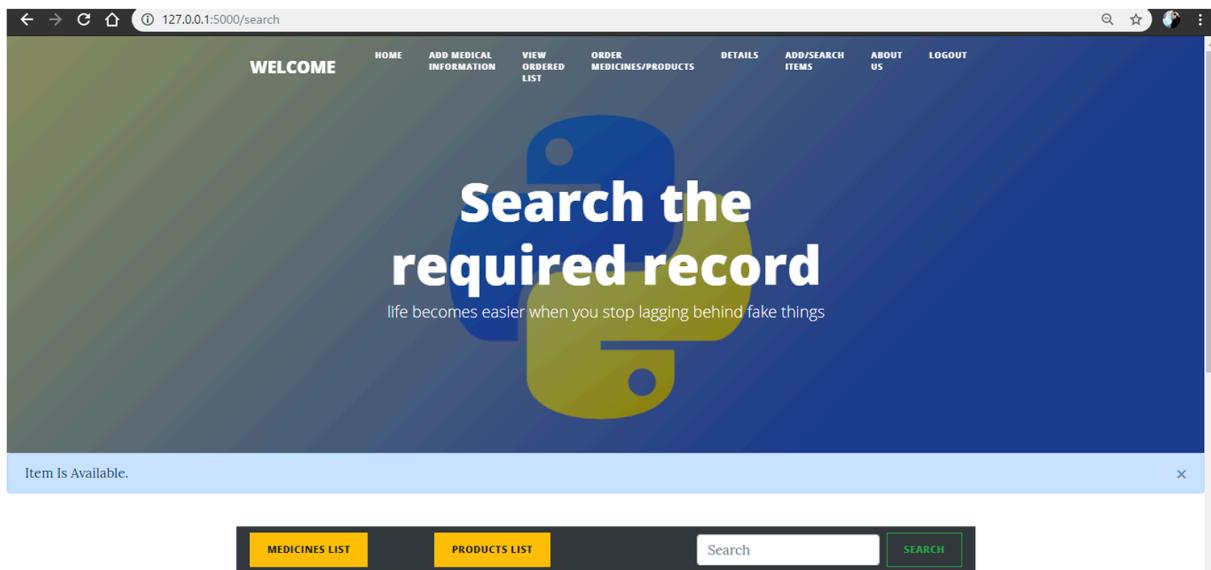
WELCOME HOME ADD MEDICAL INFORMATION VIEW ORDERED LIST ORDER MEDICINES/PRODUCTS DETAILS ADD/SEARCH ITEMS ABOUT US LOGOUT

Search the required record

life becomes easier when you stop lagging behind fake things

Item Is Available.

MEDICINES LIST PRODUCTS LIST Search SEARCH



← → ⌂ ⌂ ⓘ 127.0.0.1:5000/aboutus

WELCOME HOME ADD MEDICAL INFORMATION VIEW ORDERED LIST ORDER MEDICINES/PRODUCTS DETAILS ADD/SEARCH ITEMS ABOUT US LOGOUT

About us

This is how I started...

ABOUT Pharmacy Management System

HOW WE STARTED THIS MANAGEMENT SYSTEM

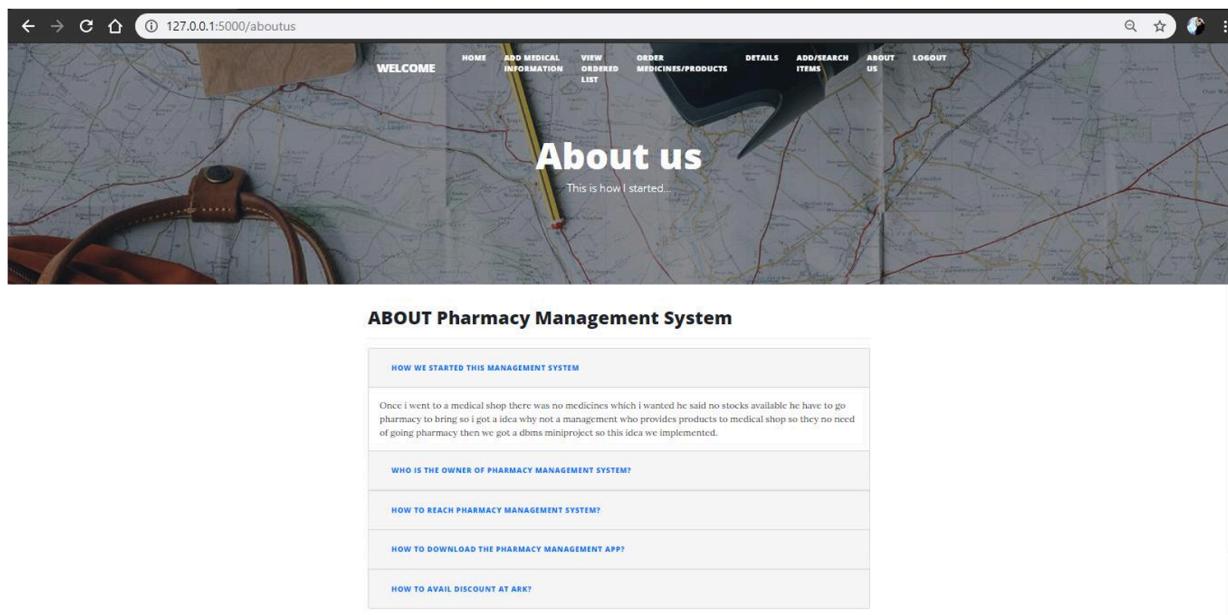
Once i went to a medical shop there was no medicines which i wanted he said no stocks available he have to go pharmacy to bring so i got a idea why not a management who provides products to medical shop so they no need of going pharmacy then we got a dbms miniproject so this idea we implemented.

WHO IS THE OWNER OF PHARMACY MANAGEMENT SYSTEM?

HOW TO REACH PHARMACY MANAGEMENT SYSTEM?

HOW TO DOWNLOAD THE PHARMACY MANAGEMENT APP?

HOW TO AVAIL DISCOUNT AT ARK?



Gmail Search mail

Inbox 5,053

Compose

new message send from akhil

aneesurrehman423@gmail.com to me 21:39 (4 minutes ago)

Medicines ordered-->glimepiride (Amaryl)-[5 sheet]
glimepiride-pioglitazone (Duetact)-[4 sheet]
glimepiride-rosiglitazone (Avandaryl)-[5 sheet]
gliclazide-[8 sheet]
glibizide (Glucotrol)-[5 sheet]
glibizide-metformin (Metaglip)-[3 sheet]
glyburide (DiaBeta, Glynase, Micronase)-[5 sheet]
glyburide-metformin (Glucovance)-[5 sheet]

products ordered-->
lux soap-[5 piece]
olay cream-[5 item]
patanjali alovera-[4 item]
garnier hair colour black-[1 dozen]
tremaine keratin smooth shampoo-[one dozen]
garnier pimple facewash-[2 dozen]

customer id --->aneesurrehman423@gmail.com
total amount=78957

localhost / localhost / coding / p +

localhost/phpmyadmin/#PMAURL-5sql.php?db=coding&table=posts&server=1&target=&token=eb51f616c609febdb6a54a87625e17541

phpMyAdmin Server: localhost > Database: coding > Table: posts

Browse Structure SQL Search Insert Export Import Privileges More

Showing rows 0 - 3 (4 total, Query took 0.0004 seconds.)

SELECT * FROM `posts`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP Code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table

Sort by key: None

+ Options

	mid	medical_name	owner_name	phone_no	address
<input type="checkbox"/>	1	national medical	akhil	9874563214	chickjala
<input type="checkbox"/>	2	params medical	Aadithyaa	9874563215	Bangalore
<input type="checkbox"/>	3	Indian medicals	Anees	7259462891	Bangalore
<input type="checkbox"/>	4	arksa medicals	pritha	9986786453	Bangalore

Check All With selected: Edit Delete Export

Show all Number of rows: 25 Filter rows: Search this table

localhost/phpmyadmin/#PMAURL-6sql.php?db=coding&table=medicines&server=1&target=&token=eb51f616c609feb6a54a87625e17541

phpMyAdmin

Server: localhost » Database: coding » Table: medicines

Browse Structure SQL Search Insert Export Import Privileges More

Showing rows 0 - 0 (1 total, Query took 0.0004 seconds.)

SELECT * FROM `medicines`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP Code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table

+ Options

	id	mid	name	medicines	products	email	amount
<input type="checkbox"/>	1	1	akhil	glimepiride (Amaryl)-[5 sheet] glimepiride-piogli...	lux soap-[5 piece] olay cream-[5 item] patanja...	aneesurrehman423@gmail.com	78957

Check All With selected: Edit Delete Export

Show all Number of rows: 25 Filter rows: Search this table

Query results operations

The screenshot shows the phpMyAdmin interface for the 'coding' database. The left sidebar lists tables: New, coding, Procedures, New, postproc, store, Tables, New, Addmp, Addpd, logs, medicines, and posts. The 'medicines' table is selected. The main panel displays the contents of the 'medicines' table with one row. The row details are: id (1), mid (1), name (akhil), medicines (glimepiride (Amaryl)-[5 sheet], glimepiride-piogli...), products (lux soap-[5 piece], olay cream-[5 item], patanja...), email (aneesurrehman423@gmail.com), and amount (78957). Below the table, there are buttons for 'Check All', 'With selected:', 'Edit', 'Delete', and 'Export'. The URL in the browser is localhost/phpmyadmin/#PMAURL-6sql.php?db=coding&table=medicines&server=1&target=&token=eb51f616c609feb6a54a87625e17541.

localhost/phpmyadmin/#PMAURL-7db_routines.php?db=coding&table=&server=1&target=&token=eb51f616c609feb6a54a87625e17541

phpMyAdmin

Server: localhost » Database: coding

Structure SQL Search Query Export Import Operations Privileges More

Routines

Name	Action	Type	Returns
postproc	Edit Execute Export Drop	PROCEDURE	
store	Edit Execute Export Drop	PROCEDURE	

New

Add routine

Start Console

The screenshot shows the phpMyAdmin interface for the 'coding' database. The left sidebar lists the same tables as the previous screenshot. The main panel is titled 'Routines'. It shows a table with two entries: 'postproc' and 'store', both of which are PROCEDURE types. There are 'Edit', 'Execute', 'Export', and 'Drop' actions listed for each. Below the table, there is a 'New' button and an 'Add routine' link. At the bottom, there are 'Start' and 'Console' buttons. The URL in the browser is localhost/phpmyadmin/#PMAURL-7db_routines.php?db=coding&table=&server=1&target=&token=eb51f616c609feb6a54a87625e17541.

phpMyAdmin

Server: localhost » Database: coding » Table: logs

Browse Structure SQL Search Insert Export Import Privileges More

Showing rows 0 - 4 (total, Query took 0.0004 seconds.)

```
SELECT * FROM `logs`
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP Code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table

Sort by key: None

+ Options

	id	mid	action	date
<input type="checkbox"/> Edit	1	1	INSERTED	2019-11-18
<input type="checkbox"/> Edit	2	1	DELETED	2019-11-19
<input type="checkbox"/> Edit	3	1	INSERTED	2019-11-19
<input type="checkbox"/> Edit	4	1	DELETED	2019-11-19
<input type="checkbox"/> Edit	5	1	INSERTED	2019-11-27

Check All With selected: Edit Delete Export

New Procedures New postproc store Tables New Addmp Addpd logs medicines posts

phpMyAdmin

Server: localhost » Database: coding » Table: medicines

Browse Structure SQL Search Insert Export Import Privileges Operations More

Triggers

Name	Action	Time	Event
deleteLog	<input type="checkbox"/> Edit <input type="checkbox"/> Export <input type="checkbox"/> Drop	AFTER	DELETE
InsertLogs	<input type="checkbox"/> Edit <input type="checkbox"/> Export <input type="checkbox"/> Drop	AFTER	INSERT

New

Add trigger

Console

New Procedures New postproc store Tables New Addmp Addpd logs medicines posts

CONCLUSION

PHARMACY MANAGEMENT SYSTEM successfully implemented offline medicines supply management database which helps us in administrating the data user for managing the tasks performed in medicines supply. The project successfully used various functionalities of Ampps and python flask and also create the fully functional database management system for offline pharmacy. Using MySQL as the database is highly beneficial as it is free to download, popular and can be easily customized. The data stored in the MySQL database can easily be retrieved and manipulated according to the requirements with basic knowledge of SQL. With the theoretical inclination of our syllabus it becomes very essential to take the atmost advantage of any opportunity of gaining practical experience that comes along. The building blocks of this Major Project “Pharmacy Supply Management System” was one of these opportunities. It gave us the requisite practical knowledge to supplement the already taught theoretical concepts thus making us more competent as a computer engineer. The project from a personal point of view also helped us in understanding the following aspects of project development:

- The planning that goes into implementing a project.
- The importance of proper planning and an organized methodology.
- The key element of team spirit and co-ordination in a successful project.