Database solution: Develop a relational database solution in SQL for PMM Grocery Supermarket to store all details and every element within the organisation.

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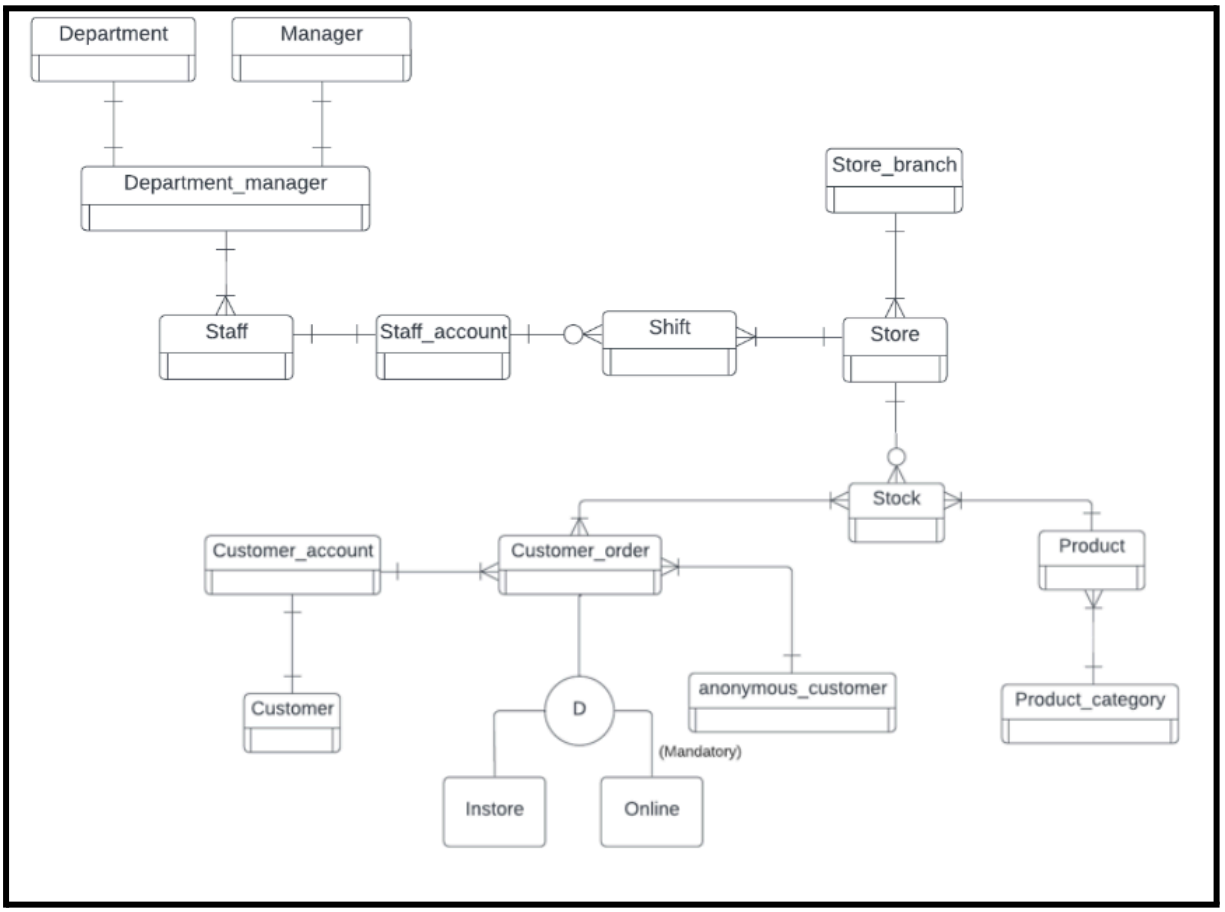
Task T1: EERD

Figure 1: EERD of PMM supermarket which shows the entity relations and cardinality between different tables of PMM database diagram.



Created using Lucidchart:

Description: Figure 1. EERD diagram of the PMM supermarket database containing a total number of 15 tables. Assumptions and rationale regarding the creation of the tables have been explained in task 2.

Task T2: Rationale and Assumptions

Store_branch table:

- Regarding the 6 different branches mentioned in the case study. We didn't know the number of stores to include as we were stuck since there may be a single store or multiple stores per branch location. So we have assumed to include a variety of stores based on per branch.
- *I.e Havant branch will have 5 different stores in that location. Plus we have given each store a name to provide uniqueness to allow easier identification .*

Customer_account/ Staff_account / Anonymous_customer table:

- We have included an anonymous_customer table to record transactions who do not possess an account but may still shop in-store.
- Customers have the option to collect loyalty points, which can be redeemed to pay for future payments.
- Both the customer_account and staff_account table both have a username and a password attribute.
- Passwords have been hashed to retain confidentiality and privacy for users.

Customer_order table:

- We have decided to design this table to showcase the transactions amongst all customers, As well as display the quantity, date of purchase, which store and how they paid for it.

Department_manager table:

- We assume that there may be one or more managers per department and linking both tables directly to the staff table could cause integrity issues. Therefore this junction (composite) table establishes a relationship between manager/s with a specific department.

Stock table:

- We have set up a composite table that conjoins both the ‘store_id’ and ‘product_id’ to represent the product's availability per store.

Shift table:

- As a rationale we decided to create a shift table to reference if a staff will work at one or more stores on a specific time and date depending on the shift patterns mentioned in the case study.

Task T3: Data Dictionary/ Scripts

Data Dictionary:

1.Table name : Department

department					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
dep_id	PK	Serial			
department_category		Varchar(50)	CHECK (department_category <> '' IS NOT NULL)		Check a value has been added is NOT NULL

2. Table : manager

manager					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
manager_id	PK	Serial			
manager_position		Varchar(100)	CHECK (manager_position <> '' IS NOT NULL)		Check a value has been added is NOT NULL

3.Table name: department_manager

department _manager					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
dep_id	PK	Integer		department	Composite key
manager_id	PK	Integer		manager	Composite key

4.Table name : staff

staff					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
staff_id	PK	Serial			
staff_fname		Varchar(20)	CHECK (staff_fname <> '')		Staff_fname checks the first name of a staff member
staff_sname		Varchar(20)	CHECK (staff_sname <> '')		Staff_sname checks the surname of a staff member
staff_gender		Varchar(6)	CHECK (staff_gender IN ('male', 'female','other')),		Check insert is from the three results shown.
staff_email		Varchar(255)	CHECK (staff_email <> '')		Check is an input has been entered
staff_dob		DATE	staff_dob DATE CHECK (staff_dob >= '1900-01-01' AND staff_dob <= CURRENT_DATE) NOT NULL		Check the date before the current date so users can input a valid DOB.
staff_phone		Varchar(12)	CHECK (staff_phone		Check if a valid number

			<> '') / CONSTRAINT UQ_staff_phone_number UNIQUE (staff_phone)		has been entered. A unique constraint has been added to the different phone numbers.
staff_address		Varchar(50)	CHECK (staff_address <> '')		
staff_postcode		Varchar(10)	CHECK (staff_postcode <> '')		
staff_role		Varchar(30)	CHECK (staff_role <> '')		This represents the main responsibilities of the staff within the store.
staff_contract		Integer	CHECK (staff_contract IS NOT NULL)		The number of hours a staff member will work per month.
staff_wage_hourly		Integer	CHECK (staff_wage_hourly <> '')		The number shows how much a member of staff earns per/hour.
manager_id		Integer	IS NULL	department_manager	Check is null since some staff will be managers and some will be normal employees.
dep_id		Integer		department_manager	
store_id		Integer		store	

5.Table name: staff account

Staff_account					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
Staff_account _id	PK	Serial			
staff_id		Integer		staff	
staff_username		Varchar(50)	UNIQUE, CHECK (LENGTH(staff_username) <= 50)		Additional check if length of characters are = true.
staff_password		Varchar(60)			

6.Table name: shift

Shift					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
shift_id	PK	Serial			
staff_account_id		Integer		staff_account	Referenced from the staff_account table which links to the staff_id.
store_id		Integer		store	
shift_date		DATE	CONSTRAINT Check_valid_shift_date CHECK (shift_date >= CURRENT_DATE),		Ensure that the data entered is greater than the arranged date for the shift.
start_time		TIME	CONSTRAINT Check_end_time_after_start_time CHECK (end_time > start_time)		Constraint checks if the time is formatted so that a shift will only start when the end time is greater.
end_time		TIME			

7. Table Name: Store

store					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
store_id	PK	Serial			
store_name		Varchar(50)	(store_name <> '')		
store_address		Varchar(50)	(store_address <> '')		
store_postcode		Varchar(10)	CHECK (store_postcode <> ''),		
store_phone		Varchar(11)	CHECK (store_phone <> ''),		Used varchar() so storing it as a string, as phone numbers may contain a combination of digits, dashes, and parentheses.
store_email		Varchar(255)	CHECK (store_email <> '')		
branch_id		Integer		store_branch	

8. Table name:store_branch

store_branch					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
branch_id	PK	Serial			
branch_location		Varchar(50)	CHECK (branch_location <> '')		

9. Table name: product category

product_category					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
category_id	PK	Serial			
category_type		Varchar(50)	CHECK (category_type <> '') and NOT NULL		To ensure a string has been entered as well as a NOT NULL constraint.

10. Table name: product

product					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
product_id	PK	Serial			
product_name		Varchar(255)	CHECK (product_name <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter N/a for not available.
product _price		Varchar(255)	CHECK (product_price IS NOT NULL)		Check if a value has been added and is not left blank. Can enter N/a for not available.
ingredients		Varchar(255)	CHECK (ingredients <> '')		Check if a value has been added and is not left blank. Can enter N/a for not available.
allegy_advice		Varchar(255)	CHECK (allergy_advice <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter N/a for not available.
lifestyle		Varchar(255)	CHECK (lifestyle <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter

					N/a for not available.
size/volume 11. Table name: stock		Varchar(255)	CHECK (size_volume <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter N/a for not available.
stock					
net_weight		Varchar(255)	CHECK (net_weight <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter N/a for not available.
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
product _id	PK	Integer		product	Composite key
store_id	PK	Integer		store	Composite key
direction_use		Varchar(255)	CHECK (direction_use <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter N/a for not available.
stock _quantity		Integer	CHECK (stock_quantity IS NOT NULL)		Check if a value has been added and is not left blank. Can enter N/a for not available.
nutrition _info		Varchar(255)	CHECK (nutrition_info <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter N/a for not available.
country_of_origin		Varcha(255)	(country_of_origin <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter N/a for not available.
storage_instruction		Varchar(255)	(storage_instruction <> '') NOT NULL		Check if a value has been added and is not left blank. Can enter

12. Table name: customer_order

customer_order					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
order_id	PK	Serial			Set as Unique so no duplicates can be created without it prompting an error.
user_id		Integer		stock	
store_id		Integer		stock	
product_id		Integer		product	
order_quantity		Integer	CHECK (order_quantity IS NOT NULL)		
order_type		Varchar(10)	CHECK (order_type IN ('in-store', 'delivery'))		Check if the order was made in-store or a delivery.
order_date	AK	Timestamp	CHECK (order_date <= current_date)		Is created as an alternative key to identify a customer order on specific time and date.
order_status		Varchar(20)	CHECK (order_status IN ('pending', 'completed')		Check if the order is still pending via delivery or has been successfully completed.
shipping_address		Varchar(30)	CHECK (shipping_address <> '')		Check if viable will require input but if a customer is anonymous it will be left N/a.
payment_status		Varchar(10)	CHECK (payment_status IN ('pending', 'completed'))		Check sees if order payment is either pending or completed.
payment _method		Varchar(10)	CHECK (payment_met		Check offers four different

			hod IN ('debt', 'credit', 'cash' ,'loyalty_points'))		options for payment credit, debt for monthly shopping, cash and loyalty points can be redeemed in exchange for goods.
anonymous_id		Integer		anonymous_account	Check is left Null which is similar to user_id as both are customers but the table to record all transitions made.

13. Table name: customer

customer					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
customer_id	PK	Serial			
c_fname		Varchar(50)	CHECK (c_fname <> '')		c = customer And fname means first name.
c_sname		Varchar(50)	CHECK (c_sname <> '')		sname means surname.
c_phone		varchar(11)	CHECK (c_phone <> '')		
c_address		Varchar(255)	CHECK (c_address <> '')		
c_postcode		Varchar(10)	CHECK (c_postcode <> '')		
c_email		Varcha(255)	CHECK (c_email <> '')		
c_dob		date	(c_dob >= '1900-01-01'::date AND c_dob <= CURRENT_DATE) .		Check so the only input for dob can only be for after 1900 and before the current date
c_gender		Varchar(6)	CHECK (c_gender IN ('male', 'female','other'))		Can only input male/ female/other

14. Table name :anonymous_customer

anonymous_customer					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
anonymous_id	PK	Serial			Anonymous customer. Used when a customer without an account shops at the store. Which records allow transitions of goods.

15. Table name:customer_account

customer_account					
Attribute name	PK or AK?	Data Type & Size	Domain and constraints	FK reference	Description (where non-obvious)
user_id	PK	Serial			
customer _id		Integer	CHECK (customer_id IS NOT NULL)	customer	
user_name		Varchar(50)	(user_name <> '') Unique		Username needed to be created and must be unique from other names .
user_password		Varchar(255)	(user_password <> '')		Passwords from users to have access to the website.
user_email		Varchar(100)	(user_email <> '')		
registration_date		Timestamp	(registration_date <=		Check to see time is created

			current_date)		up to the current date and is used to see when a user has signed up to create an account.
loyalty_point		Integer	CHECK (loyalty_points IS NULL OR loyalty_points ~ '^[0-9]+$')		Points that are accumulated when purchases are made at the store. Is null but only allows integer values to be entered.
account_status		Varchar(10)	Have a CHECK so it only allows active or inactive within the inserts.		To represent the status of the user who is either ‘active’ or ‘inactive’ of the account. if a user for example doesn’t use their account for X number of days and becomes in-active. PMM could send an automated email to send a warning of account termination within 30 days. To help reduce storage space.

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Table Scripts

Tables used for task 4:

Database:

```
CREATE DATABASE pmm_supermarket;
```

product_category table:

```
CREATE TABLE product_category (
    category_id SERIAL PRIMARY KEY,
    category_type VARCHAR(50) NOT NULL,
      -- CHECK constraints
    CHECK (category_type <> '')
);
```

product table:

```
CREATE TABLE product (
    product_id SERIAL PRIMARY KEY,
    product_name VARCHAR(255) NOT NULL,
    product_price DECIMAL(10,2) NOT NULL,
    ingredients VARCHAR(255) NOT NULL,
    allergy_advice VARCHAR(255) NOT NULL,
    lifestyle VARCHAR(255) NOT NULL,
    size_volume VARCHAR(255) NOT NULL,
    net_weight VARCHAR(255) NOT NULL,
    direction_use VARCHAR(255) NOT NULL,
    nutrition_info VARCHAR(255) NOT NULL,
    country_of_origin VARCHAR(255) NOT NULL,
    storage_instruction VARCHAR(255) NOT NULL,
    category_id INT NOT NULL,
    product_category(category_id),
    CONSTRAINT fk_product_category_id FOREIGN KEY (category_id) REFERENCES
      -- CHECK constraints
    CHECK (product_name <> ''),
    CHECK (product_price IS NOT NULL),
    CHECK (ingredients <> ''),
    CHECK (allergy_advice <> ''),
    CHECK (lifestyle <> ''),
    CHECK (size_volume <> ''),
    CHECK (net_weight <> ''),
    CHECK (direction_use <> ''),
    CHECK (nutrition_info <> ''),
    CHECK (country_of_origin <> ''),
    CHECK (storage_instruction <> '')
);
```

store_branch table:

```
CREATE TABLE store_branch(
   branch_id SERIAL PRIMARY KEY,
   branch_location VARCHAR(100) NOT NULL,
     -- CHECK constraints
   CHECK (branch_location <> '')
);
```

store table:

```
CREATE TABLE store (
   store_id SERIAL PRIMARY KEY,
   store_name VARCHAR(30) NOT NULL,
   store_address VARCHAR(100) NOT NULL,
   store_postcode VARCHAR(10) NOT NULL,
   store_phone VARCHAR(11) NOT NULL,
   store_email VARCHAR(255) NOT NULL,
   branch_id INT NOT NULL,
     -- CHECK constraints
   CHECK (store_name <> ''),
   CHECK (store_postcode <> ''),
   CHECK (store_address <> ''),
   CHECK (store_phone <> ''),
   CHECK (store_email <> ''),
   CONSTRAINT fk_pmm_branch FOREIGN KEY(branch_id) REFERENCES
store_branch(branch_id)
);
```

stock table:

```
CREATE TABLE stock (
  store_id INT NOT NULL REFERENCES store(store_id),
  product_id INT NOT NULL REFERENCES product(product_id),
  stock_quantity INT NOT NULL,
  PRIMARY KEY(store_id,product_id),
       -- CHECK constraints
  CHECK (stock_quantity IS NOT NULL)
);
```

manager table:

```
CREATE TABLE manager (
   manager_id SERIAL PRIMARY KEY,
   manager_position VARCHAR(100) NOT NULL,
     -- CHECK constraints
   CHECK (manager_position <> '' IS NOT NULL)
);
```

department table:

```
CREATE TABLE department (
   dep_id SERIAL PRIMARY KEY,
   department_category VARCHAR(50) NOT NULL,
     -- CHECK constraints
   CHECK (department_category <> '' IS NOT NULL)
);
```

department_manager table:

```
CREATE TABLE department_manager (
  manager_id INT,
  dep_id INT,
  PRIMARY KEY (manager_id, dep_id),
  FOREIGN KEY (manager_id) REFERENCES manager (manager_id),
  FOREIGN KEY (dep_id) REFERENCES department (dep_id)
);
```

staff table:

```
CREATE TABLE staff (
   staff_id SERIAL PRIMARY KEY,
   staff_fname VARCHAR(50) NOT NULL,
   staff_sname VARCHAR(50) NOT NULL,
   staff_gender VARCHAR(10) NOT NULL CHECK (staff_gender IN ('male', 'female', 'other')),
   staff_dob DATE NOT NULL CHECK (staff_dob >= '1900-01-01' AND staff_dob <=
CURRENT_DATE),
   staff_email VARCHAR(255) NOT NULL,
   staff_phone VARCHAR(12) NOT NULL,
   staff_address VARCHAR(100) NOT NULL,
   staff_postcode VARCHAR(10) NOT NULL,
   staff_role VARCHAR(30) NOT NULL,
   staff_contract INT NOT NULL,
   staff_wage_hourly VARCHAR(10) NOT NULL,
   dep_id INT NOT NULL,
   manager_id INT NULL,
   CONSTRAINT fk_department_manager FOREIGN KEY (manager_id, dep_id) REFERENCES
department_manager (manager_id, dep_id),
```

```
        -- CHECK constraints
    CHECK (staff_fname <> ''),
    CHECK (staff_sname <> ''),
    CHECK (staff_email <> ''),
    CHECK (staff_phone <> ''),
    CHECK (staff_address <> ''),
    CHECK (staff_postcode <> ''),
    CHECK (staff_role <> ''),
    CHECK (staff_contract IS NOT NULL),
    CHECK (staff_wage_hourly <> '')
);
```

staff_account table:

```
CREATE TABLE staff_account (
  staff_account_id INT PRIMARY KEY,
  staff_id INT NOT NULL,
  staff_username VARCHAR(50) UNIQUE NOT NULL,
  staff_password VARCHAR(60) NOT NULL,
  CHECK (LENGTH(staff_username) <= 50),
  CONSTRAINT check_password_length CHECK (LENGTH(staff_password) >= 60),
  FOREIGN KEY (staff_id) REFERENCES staff(staff_id)
);
```

shift table:

```
CREATE TABLE shift (
  shift_id SERIAL PRIMARY KEY,
  staff_account_id INT NOT NULL,
  store_id INT NOT NULL,
  shift_date DATE,
  start_time TIME,
  end_time TIME,
  FOREIGN KEY (staff_account_id) REFERENCES staff_account(staff_account_id),
  FOREIGN KEY (store_id) REFERENCES store(store_id),
  CONSTRAINT Check_valid_shift_date CHECK (shift_date >= CURRENT_DATE),
  CONSTRAINT Check_end_time_after_start_time CHECK (end_time > start_time)
);
```

customer table:

```
CREATE TABLE customer (
   customer_id SERIAL PRIMARY KEY,
   c_fname VARCHAR(50) NOT NULL,
   c_sname VARCHAR(50) NOT NULL,
   c_gender VARCHAR(10) NOT NULL,
   c_dob DATE CHECK (c_dob >= '1900-01-01' AND c_dob <= CURRENT_DATE) NOT NULL,
   c_phone VARCHAR(20) NOT NULL,
   c_email VARCHAR(255) NOT NULL,
   c_address VARCHAR(100) NOT NULL,
   c_postcode VARCHAR(10) NOT NULL,
    -- CHECK constraints
   CHECK (c_fname <> ''),
   CHECK (c_sname <> ''),
   CHECK (c_gender IN ('male', 'female','other')),
   CHECK (c_phone <> ''),
   CHECK (c_email <> ''),
   CHECK (c_address <> ''),
   CHECK (c_postcode <> '')
);
```

anonymous_customer table:

```
CREATE TABLE anonymous_customer (
  anonymous_id SERIAL PRIMARY KEY NOT NULL
);
```

customer_accounttable:

```
CREATE TABLE customer_account(
   user_id SERIAL PRIMARY KEY,
   customer_id INT NOT NULL,
   user_name VARCHAR(50) NOT NULL UNIQUE,
   user_password VARCHAR(255) NOT NULL,
   user_email VARCHAR(255) NOT NULL,
   registration_date timestamp NOT NULL,
   loyalty_points VARCHAR(255) NOT NULL,
   account_status VARCHAR(20) NOT NULL,
   CONSTRAINT fk_pmm_account FOREIGN KEY(customer_id) REFERENCES customer(customer_id),
    -- CHECK constraints
   CHECK (customer_id IS NOT NULL),
   CHECK (user_name <> ''),
   CHECK (user_password <> ''),
   CHECK (user_email <> ''),
   CHECK (loyalty_points IS NULL OR loyalty_points ~ '^[0-9]+$'),
   CHECK (registration_date <= current_date),
   CHECK (account_status IN ('active', 'inactive'))
);
```

customer_order table:

```
CREATE TABLE customer_order(
   order_id SERIAL,
   user_id INT NULL,
   store_id INT NOT NULL,
   product_id INT NOT NULL,
   anonymous_id INT NULL,
   order_quantity INT NOT NULL,
   order_type VARCHAR(50) NOT NULL,
   order_date timestamp,
   order_status VARCHAR(20),
   shipping_address VARCHAR(255) ,
   payment_status VARCHAR(50) NOT NULL,
   payment_method VARCHAR(50) NOT NULL,
   PRIMARY KEY(order_id, order_date),
   CONSTRAINT fk_customer_order_user_id FOREIGN KEY(user_id) REFERENCES
customer_account(user_id),
   CONSTRAINT fk_customer_order_pmm_product_id FOREIGN KEY (store_id, product_id)
REFERENCES stock (store_id, product_id),
   CONSTRAINT fk_customer_order_ann_cust_id FOREIGN KEY(anonymous_id) REFERENCES
anonymous_customer(anonymous_id),
    -- CHECK constraints
   CHECK (order_quantity IS NOT NULL),
   CHECK (order_type IN ('in-store', 'delivery')),
   CHECK (order_date <= current_date),
   CHECK (order_status IN ('pending', 'completed')),
   CHECK (shipping_address <> ''),
   CHECK (payment_status  IN ('pending', 'completed')),
   CHECK (payment_method  IN ('debt', 'credit', 'cash' ,'loyalty_points'))
);
```

Task T4: SQL Queries

SQL queries

```
SELECT p.product_name, p.product_price, pc.category_type, st.stock_quantity,
s.store_name, sb.branch_location
FROM product p
JOIN stock st ON p.product_id = st.product_id
JOIN store_branch sb ON st.store_id = sb.branch_id
JOIN store s ON sb.branch_id = s.store_id
JOIN product_category pc ON p.category_id = pc.category_id
WHERE st.stock_quantity < 20
ORDER BY st.stock_quantity desc;
```

Description: The following query will enable a view of the stock availability for each store_branch. As well as display the products name, category and price per branch. Managers can use this information to re-stock products that have gone below a certain threshold. In this screenshot a quantity below 20 has been selected but this can be altered.

```
SELECT
  s.staff_id,
  CONCAT(s.staff_fname, ' ', s.staff_sname) AS staff_name,
  sa.staff_username,
  DATE_PART('year', age(current_date, s.staff_dob)) AS staff_age,
  s.staff_role,
  sb.branch_location,
  sh.shift_date,
  sh.start_time,
  sh.end_time,
  DATE_PART('hour', sh.end_time - sh.start_time) + DATE_PART('minute', sh.end_time - sh.start_time) / 60 AS working_hours,
  d.department_category
FROM
  staff s
JOIN
  staff_account sa ON s.staff_id = sa.staff_id
LEFT JOIN
  shift sh ON sa.staff_account_id = sh.staff_account_id
LEFT JOIN
  store st ON sh.store_id = st.store_id
LEFT JOIN
  store_branch sb ON st.branch_id = sb.branch_id
LEFT JOIN
  department_manager dm ON dm.dep_id = s.dep_id
LEFT JOIN
  department d ON dm.dep_id = d.dep_id
WHERE
  sb.branch_location = 'Havant' AND
  s.staff_role = 'stocker' AND d.department_category='Warehouse'
ORDER BY s.staff_id;
```

Description: This query shows a targeted search on 'warehouse' stockers with additional employees details regarding status on shift date and hours per staff . Furthermore, it also shows where staff will be assigned depending on the shift pattern, and in the example it shows Havant. This can be altered to view other branches when inputted in the sb.branch_location = '' at line 28

```
SELECT EXTRACT(YEAR FROM co.order_date) AS year,
   CONCAT('Q', EXTRACT(QUARTER FROM co.order_date)) AS quarter,
   sb.branch_location AS branch_location,
   SUM(co.order_quantity * p.product_price) AS total_Revenue
FROM customer_order co
JOIN store s ON co.store_id = s.store_id
JOIN store_branch sb ON s.branch_id = sb.branch_id
JOIN product p ON co.product_id = p.product_id
WHERE co.order_status = 'completed'
AND s.store_id = 8
GROUP BY year, quarter, branch_location
ORDER BY year, quarter, branch_location;
```

Description: This query shows the income generated for store_id=8. By joining three tables together as a 'join', we can calculate the quarterly income of each branch by the selected year. PMM can use this for their fiscal quarterly reports to calculate total costs and gauge performance per store and rate sales in each branch.

NOTE: Line 10 - you can alter the s.store_id to show each store's sales.

```
pmm_supermarket=# SELECT EXTRACT(YEAR FROM co.order_date) AS year,
CONCAT('Q', EXTRACT(QUARTER FROM co.order_date)) AS quarter,
sb.branch_location AS branch_location,
SUM(co.order_quantity * p.product_price) AS total_Revenue
FROM customer_order co
JOIN store s ON co.store_id = s.store_id
JOIN store_branch sb ON s.branch_id = sb.branch_id
JOIN product p ON co.product_id = p.product_id
WHERE co.order_status = 'completed'
AND s.store_id = 8
GROUP BY year, quarter, branch_location
ORDER BY year, quarter, branch_location;
 year | quarter | branch_location | total_revenue
------+---------+-----------------+---------------
 2022 | Q1      | Fareham         |         25.98
 2022 | Q2      | Fareham         |          3.99
 2022 | Q3      | Fareham         |        190.64
 2022 | Q4      | Fareham         |         39.39
 2023 | Q1      | Fareham         |          4.97
(5 rows)
```

Demonstration

Screenshot of the first query part 1:

```
pmm_supermarket=# SELECT p.product_name, p.product_price, pc.category_type, st.stock_quantity, s.store_name, sb.branch_location
FROM product p
JOIN stock st ON p.product_id = st.product_id
JOIN store_branch sb ON st.store_id = sb.branch_id
JOIN store s ON sb.branch_id = s.store_id
JOIN product_category pc ON p.category_id = pc.category_id
WHERE st.stock_quantity < 20
ORDER BY st.stock_quantity desc;
         product_name          | product_price |    category_type    | stock_quantity |   store_name    | branch_location
-------------------------------+---------------+---------------------+----------------+-----------------+-----------------
 Flour                         |          2.99 | Pantry_Staples      |             15 | Williams & Sons | Gosport
 Rulers                        |          0.79 | School_Supplies     |             15 | buckinghum_pmm  | Waterlooville
 Calcium Supplement            |          9.99 | Health_and_Wellness |             13 | Hallmart        | Fareham
 Peanut Butter                 |          3.99 | Pantry_Staples      |             11 | Blackstone      | Portsmouth
 milk                          |          1.50 | Dairy               |             10 | buckinghum_pmm  | Waterlooville
 Notebooks                     |          1.49 | School_Supplies     |             10 | buckinghum_pmm  | Waterlooville
 Turkey                        |          9.99 | Meat                |             10 | buckinghum_pmm  | Waterlooville
 Chicken Breast                |          6.99 | Meat                |             10 | Jonest          | Havant
 Scissors                      |          1.99 | School_Supplies     |              8 | buckinghum_pmm  | Waterlooville
 Breadcrumbs                   |          1.99 | Pantry_Staples      |              8 | Hallmart        | Fareham
 Baby Sunscreen                |          8.99 | Baby_Care_Products  |              8 | Blackstone      | Portsmouth
 Pencil Sharpener              |          0.99 | School_Supplies     |              7 | buckinghum_pmm  | Waterlooville
 Beef                          |          9.99 | Meat                |              7 | Williams & Sons | Gosport
 Organic Extra Large Brown Eggs |          3.99 | Eggs                |              7 | Blackstone      | Portsmouth
 Highlighters                  |          2.49 | School_Supplies     |              6 | buckinghum_pmm  | Waterlooville
 Pasta                         |          2.49 | Pantry_Staples      |              5 | Hallmart        | Fareham
 Pens                          |          1.49 | School_Supplies     |              5 | buckinghum_pmm  | Waterlooville
 Beef                          |          9.99 | Meat                |              4 | buckinghum_pmm  | Waterlooville
 Halibut                       |         13.99 | Seafood             |              4 | Smith           | Chichester
 Baby Bath Tub                 |         14.99 | Baby_Care_Products  |              3 | Blackstone      | Portsmouth
 Chicken                       |          7.99 | Meat                |              3 | buckinghum_pmm  | Waterlooville
 Mussels                       |          9.99 | Seafood             |              2 | Smith           | Chichester
 Balsamic Vinegar              |          4.99 | Pantry_Staples      |              1 | Hallmart        | Fareham
(23 rows)
```

2. Screenshot of the second query - part 1:

```
pmm_supermarket=# SELECT
  s.staff_id,
  CONCAT(s.staff_fname, ' ', s.staff_sname) AS staff_name,
  sa.staff_username,
  DATE_PART('year', age(current_date, s.staff_dob)) AS staff_age,
  s.staff_role,
  sb.branch_location,
  sh.shift_date,
  sh.start_time,
  sh.end_time,
  DATE_PART('hour', sh.end_time - sh.start_time) + DATE_PART('minute', sh.end_time - sh.start_time) / 60 AS working_hours,
  d.department_category
FROM
  staff s
JOIN
  staff_account sa ON s.staff_id = sa.staff_id
LEFT JOIN
  shift sh ON sa.staff_account_id = sh.staff_account_id
LEFT JOIN
  store st ON sh.store_id = st.store_id
LEFT JOIN
  store_branch sb ON st.branch_id = sb.branch_id
LEFT JOIN
  department_manager dm ON dm.dep_id = s.dep_id
LEFT JOIN
  department d ON dm.dep_id = d.dep_id
WHERE
  sb.branch_location = 'Havant' AND
  s.staff_role = 'stocker' AND d.department_category='Warehouse'
ORDER BY s.staff_id;
 staff_id |     staff_name     |  staff_username   | staff_age | staff_role | branch_location | shift_date | start_time | end_time | working_hours | department_category
----------+--------------------+-------------------+-----------+------------+-----------------+------------+------------+----------+---------------+---------------------
      282 | Mia Taylor         | rpennino7t        |        32 | stocker    | Havant          | 2024-12-10 | 11:00:00   | 18:00:00 |             7 | Warehouse
      286 | Charlotte Thompson | cshevlan7x        |        29 | stocker    | Havant          | 2024-08-04 | 11:00:00   | 18:00:00 |             7 | Warehouse
      288 | Ava Xill           | mrockhall7z       |        27 | stocker    | Havant          | 2024-01-05 | 12:00:00   | 20:00:00 |             8 | Warehouse
      292 | Amelia Anderson    | pwidger83         |        28 | stocker    | Havant          | 2024-04-15 | 11:00:00   | 17:00:00 |             6 | Warehouse
      294 | Sophia May         | aswaite85         |        33 | stocker    | Havant          | 2024-03-14 | 07:00:00   | 14:00:00 |             7 | Warehouse
      302 | Charlotte Gonzalez | drosendahl8d      |        33 | stocker    | Havant          | 2024-05-19 | 09:00:00   | 17:00:00 |             8 | Warehouse
      314 | Olivia Mub         | emurdoch8p        |        32 | stocker    | Havant          | 2024-02-24 | 11:00:00   | 19:00:00 |             8 | Warehouse
      344 | Amelia Clark       | edemange9j        |        27 | stocker    | Havant          | 2024-08-09 | 08:00:00   | 16:00:00 |             8 | Warehouse
      352 | Oliver Martin      | fmilksop9r        |        27 | stocker    | Havant          | 2024-07-27 | 11:00:00   | 22:00:00 |            11 | Warehouse
      411 | Oliver Milt        | alodevickbe       |        32 | stocker    | Havant          | 2024-09-01 | 13:00:00   | 14:00:00 |             1 | Warehouse
      419 | Noah Anderson      | gpedgriftbm       |        28 | stocker    | Havant          | 2024-04-11 | 08:00:00   | 17:00:00 |             9 | Warehouse
      425 | Ethan Harris       | dweedenburgbs     |        29 | stocker    | Havant          | 2024-03-21 | 09:00:00   | 14:00:00 |             5 | Warehouse
      504 | Noah Scott         | rmowatdz          |        27 | stocker    | Havant          | 2024-05-10 | 11:00:00   | 18:00:00 |             7 | Warehouse
      532 | Benjamin Fredrick  | cirvinger         |        32 | stocker    | Havant          | 2024-06-12 | 10:00:00   | 14:00:00 |             4 | Warehouse
      538 | Sophia King        | oohearex          |        27 | stocker    | Havant          | 2024-08-31 | 10:00:00   | 21:00:00 |            11 | Warehouse
      544 | Ava Rick           | mmckintoshf3      |        28 | stocker    | Havant          | 2024-02-19 | 10:00:00   | 18:00:00 |             8 | Warehouse
      572 | Liam Lewis         | inardifv          |        36 | stocker    | Havant          | 2024-10-06 | 08:00:00   | 20:00:00 |            12 | Warehouse
      582 | Liam Lopez         | mlonergang5       |        32 | stocker    | Havant          | 2024-02-07 | 07:00:00   | 19:00:00 |            12 | Warehouse
```

Part 2 - End of the query

```
 staff_id |     staff_name     |  staff_username   | staff_age | staff_role | branch_location | shift_date | start_time | end_time | working_hours | department_cate
----------+--------------------+-------------------+-----------+------------+-----------------+------------+------------+----------+---------------+----------------
      282 | Mia Taylor         | rpennino7t        |        32 | stocker    | Havant          | 2024-12-10 | 11:00:00   | 18:00:00 |             7 | Warehouse
      286 | Charlotte Thompson | cshevlan7x        |        29 | stocker    | Havant          | 2024-08-04 | 11:00:00   | 18:00:00 |             7 | Warehouse
      288 | Ava Xill           | mrockhall7z       |        27 | stocker    | Havant          | 2024-01-05 | 12:00:00   | 20:00:00 |             8 | Warehouse
      292 | Amelia Anderson    | pwidger83         |        28 | stocker    | Havant          | 2024-04-15 | 11:00:00   | 17:00:00 |             6 | Warehouse
      294 | Sophia May         | aswaite85         |        33 | stocker    | Havant          | 2024-03-14 | 07:00:00   | 14:00:00 |             7 | Warehouse
      302 | Charlotte Gonzalez | drosendahl8d      |        33 | stocker    | Havant          | 2024-05-19 | 09:00:00   | 17:00:00 |             8 | Warehouse
      314 | Olivia Mub         | emurdoch8p        |        32 | stocker    | Havant          | 2024-02-24 | 11:00:00   | 19:00:00 |             8 | Warehouse
      344 | Amelia Clark       | edemange9j        |        27 | stocker    | Havant          | 2024-08-09 | 08:00:00   | 16:00:00 |             8 | Warehouse
      352 | Oliver Martin      | fmilksop9r        |        27 | stocker    | Havant          | 2024-07-27 | 11:00:00   | 22:00:00 |            11 | Warehouse
      411 | Oliver Milt        | alodevickbe       |        32 | stocker    | Havant          | 2024-09-01 | 13:00:00   | 14:00:00 |             1 | Warehouse
      419 | Noah Anderson      | gpedgriftbm       |        28 | stocker    | Havant          | 2024-04-11 | 08:00:00   | 17:00:00 |             9 | Warehouse
      425 | Ethan Harris       | dweedenburgbs     |        29 | stocker    | Havant          | 2024-03-21 | 09:00:00   | 14:00:00 |             5 | Warehouse
      504 | Noah Scott         | rmowatdz          |        27 | stocker    | Havant          | 2024-05-10 | 11:00:00   | 18:00:00 |             7 | Warehouse
      532 | Benjamin Fredrick  | cirvinger         |        32 | stocker    | Havant          | 2024-06-12 | 10:00:00   | 14:00:00 |             4 | Warehouse
      538 | Sophia King        | oohearex          |        27 | stocker    | Havant          | 2024-08-31 | 10:00:00   | 21:00:00 |            11 | Warehouse
      544 | Ava Rick           | mmckintoshf3      |        28 | stocker    | Havant          | 2024-02-19 | 10:00:00   | 18:00:00 |             8 | Warehouse
      572 | Liam Lewis         | inardifv          |        36 | stocker    | Havant          | 2024-10-06 | 08:00:00   | 20:00:00 |            12 | Warehouse
      582 | Liam Lopez         | mlonergang5       |        32 | stocker    | Havant          | 2024-02-07 | 07:00:00   | 19:00:00 |            12 | Warehouse
      584 | Noah Yeti          | ksimnell7g        |        29 | stocker    | Havant          | 2024-09-27 | 10:00:00   | 14:00:00 |             4 | Warehouse
      632 | Jaxon  Sullivan    | sgristwoodhj      |        32 | stocker    | Havant          | 2024-01-11 | 10:00:00   | 17:00:00 |             7 | Warehouse
      662 | Sophia Pill        | fsooperid         |        30 | stocker    | Havant          | 2024-05-06 | 11:00:00   | 19:00:00 |             8 | Warehouse
      670 | Nova Carter        | hklimentyevil     |        31 | stocker    | Havant          | 2024-05-27 | 10:00:00   | 19:00:00 |             9 | Warehouse
      676 | Ava Turner         | fkimblenir        |        35 | stocker    | Havant          | 2024-01-19 | 10:00:00   | 21:00:00 |            11 | Warehouse
      682 | Sophia Vill        | kbrennanix        |        27 | stocker    | Havant          | 2024-04-17 | 13:00:00   | 17:00:00 |             4 | Warehouse
      695 | Carter Chowdhury   | mtrussmanja       |        35 | stocker    | Havant          | 2024-07-29 | 09:00:00   | 21:00:00 |            12 | Warehouse
      708 | Amelia bill        | fgiacomijn        |        34 | stocker    | Havant          | 2024-06-29 | 08:00:00   | 15:00:00 |             7 | Warehouse
      712 | Sofia Rahim        | aalelsandrowiczjr |        30 | stocker    | Havant          | 2024-01-01 | 13:00:00   | 16:00:00 |             3 | Warehouse
      721 | Olivia Some        | crutherfordk0     |        36 | stocker    | Havant          | 2024-09-27 | 11:00:00   | 18:00:00 |             7 | Warehouse
      723 | Ava Dilly          | hcapek2           |        34 | stocker    | Havant          | 2024-04-18 | 12:00:00   | 21:00:00 |             9 | Warehouse
      725 | Liam Lol           | pschwandermannk4  |        32 | stocker    | Havant          | 2024-05-18 | 09:00:00   | 21:00:00 |            12 | Warehouse
      733 | Emma Ann           | vnovkovickc       |        25 | stocker    | Havant          | 2024-06-04 | 11:00:00   | 14:00:00 |             3 | Warehouse
      735 | Noah Martinez      | mcelloke          |        32 | stocker    | Havant          | 2024-08-20 | 07:00:00   | 14:00:00 |             7 | Warehouse
      739 | Liam Oli           | lbyrdki           |        28 | stocker    | Havant          | 2024-02-11 | 10:00:00   | 16:00:00 |             6 | Warehouse
      742 | Emma Ant           | lballink1         |        24 | stocker    | Havant          | 2024-02-01 | 13:00:00   | 22:00:00 |             9 | Warehouse
      746 | Olivia Aopl        | cobrallaghankp    |        28 | stocker    | Havant          | 2024-07-16 | 11:00:00   | 14:00:00 |             3 | Warehouse
      751 | Sophia Coll        | ubaudinku         |        32 | stocker    | Havant          | 2024-01-16 | 09:00:00   | 22:00:00 |            13 | Warehouse
      753 | Olivia Riche       | hclorleykw        |        29 | stocker    | Havant          | 2024-10-15 | 10:00:00   | 18:00:00 |             8 | Warehouse
      772 | Charlotte Moore    | jberceroslf       |        33 | stocker    | Havant          | 2024-11-07 | 08:00:00   | 21:00:00 |            13 | Warehouse
      778 | Noah Doer          | lblankmanll       |        29 | stocker    | Havant          | 2024-07-24 | 07:00:00   | 22:00:00 |            15 | Warehouse
      783 | Rohit Thanpa       | Rohitthapa        |        21 | stocker    | Havant          | 2024-04-06 | 07:00:00   | 21:00:00 |            14 | Warehouse
(40 rows)

pmm_supermarket=#
```

3.Screenshot of the third query:

```
pmm_supermarket=# SELECT EXTRACT(YEAR FROM co.order_date) AS year,
CONCAT('Q', EXTRACT(QUARTER FROM co.order_date)) AS quarter,
sb.branch_location AS branch_location,
SUM(co.order_quantity * p.product_price) AS total_Revenue
FROM customer_order co
JOIN store s ON co.store_id = s.store_id
JOIN store_branch sb ON s.branch_id = sb.branch_id
JOIN product p ON co.product_id = p.product_id
WHERE co.order_status = 'completed'
AND s.store_id = 8
GROUP BY year, quarter, branch_location
ORDER BY year, quarter, branch_location;
 year | quarter | branch_location | total_revenue
------+---------+-----------------+---------------
 2022 | Q1      | Fareham         |         25.98
 2022 | Q2      | Fareham         |          3.99
 2022 | Q3      | Fareham         |        190.64
 2022 | Q4      | Fareham         |         39.39
 2023 | Q1      | Fareham         |          4.97
(5 rows)
```

Appendix:

Total number of tables shown within the VM/ psql.:

```
up934633=# \c pmm_supermarket;
You are now connected to database "pmm_supermarket" as user "up934633".
pmm_supermarket=# \dt;
              List of relations
 Schema |        Name         | Type  |  Owner
--------+---------------------+-------+----------
 public | anonymous_customer  | table | up934633
 public | customer            | table | up934633
 public | customer_account    | table | up934633
 public | customer_order      | table | up934633
 public | department          | table | up934633
 public | department_manager  | table | up934633
 public | manager             | table | up934633
 public | product             | table | up934633
 public | product_category    | table | up934633
 public | shift               | table | up934633
 public | staff               | table | up934633
 public | staff_account       | table | up934633
 public | stock               | table | up934633
 public | store               | table | up934633
 public | store_branch        | table | up934633
(15 rows)
```

Inserts of all the records from all thetables - I have limited the inserts but have included a : *select count(*) from….. To show the total number of records per table.* This was done to show the total number of inserts within all tables as well as to reduce page wastage.

1. Product_category:

```
INSERT INTO product_category (category_id,category_type ) VALUES (1,'Dairy');
INSERT INTO product_category (category_id,category_type ) VALUES (2,'Bread');
INSERT INTO product_category (category_id,category_type ) VALUES (3,'Meat');
INSERT INTO product_category (category_id,category_type ) VALUES (4,'Fruit');
INSERT INTO product_category (category_id,category_type ) VALUES (5,'Vegetable');
INSERT INTO product_category (category_id, category_type) VALUES (6, 'Eggs');
INSERT INTO product_category (category_id, category_type) VALUES (7, 'Produce');
INSERT INTO product_category (category_id, category_type) VALUES (8, 'Seafood');
INSERT INTO product_category (category_id, category_type) VALUES (9, 'Gluten-free');
INSERT INTO product_category (category_id, category_type) VALUES (10, 'Frozen_Foods');
INSERT INTO product_category (category_id, category_type) VALUES (11, 'Beverages');
INSERT INTO product_category (category_id, category_type) VALUES (12, 'Canned_Packaged_Foods');
INSERT INTO product_category (category_id, category_type) VALUES (13, 'Snacks_and_Sweets');
INSERT INTO product_category (category_id, category_type) VALUES (14, 'Pantry_Staples');
INSERT INTO product_category (category_id, category_type) VALUES (15, 'Household_Cleaning_Supplies');
INSERT INTO product_category (category_id, category_type) VALUES (16, 'Personal_Care_Products');
INSERT INTO product_category (category_id, category_type) VALUES (17, 'Baby_Care_Products');
INSERT INTO product_category (category_id, category_type) VALUES (18, 'Pet_Food_and_Supplies');
INSERT INTO product_category (category_id, category_type) VALUES (19, 'Health_and_Wellness');
INSERT INTO product_category (category_id, category_type) VALUES (20, 'Home_and_Kitchen_Essentials');
INSERT INTO product_category (category_id, category_type) VALUES (21, 'School_Supplies');
```

```
pmm_supermarket=# select count(*) from product_category;
 count
-------
    21
(1 row)
```

2. product

```
INSERT INTO product
(product_id,product_name,product_price,ingredients,allergy_advice,lifestyle,size_volume,net_weight,direction_use,nutrition_
info,country_of_origin,storage_instruction, category_id)
VALUES (1,'Bread','2.99' , 'wheat / yeast ', ' gluten', 'big', '50g' , '100g', 'hold properly', 'carbs', 'UK' , 'cold', 2);
INSERT INTO product
(product_id,product_name,product_price,ingredients,allergy_advice,lifestyle,size_volume,net_weight,direction_use,nutrition_
info,country_of_origin,storage_instruction, category_id)
VALUES (2,'milk','1.50' , 'dairy ', ' gluten', 'small', '100ml' , '100ml', 'hold and puur', 'dairy', 'UK' , 'cold', 1) ;
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume,
net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (3, 'super_milk', '1.99', 'milk', 'lactose', 'regular', '1L', '1000g', 'shake well before use', 'calcium, protein', 'USA',
'refrigerate', 1) ;
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume,
net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (4, 'Cheese', '3.99', 'milk, salt, rennet', 'lactose', 'regular', '200g', '200g', 'slice and serve', 'calcium, protein', 'USA',
'refrigerate', 1 );
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume,
net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (5, 'Orange Juice', '2.49', 'orange', 'none', 'regular', '500ml', '500ml', 'shake well before use', 'vitamin C', 'Spain',
'refrigerate', 4);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume,
net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (6, 'Yogurt', '1.99', 'milk, live cultures', 'lactose', 'small', '150g', '150g', 'stir before eating', 'calcium, probiotics', 'USA',
'refrigerate', 1) ;
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume,
net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (7, 'Apple', '0.99', 'apple', 'none', 'small', '1 piece', '150g', 'wash before eating', 'fiber, vitamin C', 'USA', 'room
temperature', 4);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume,
```

net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (8, 'Carrots', '0.79', 'carrots', 'none', 'regular', '1 piece', '100g', 'wash and peel', 'vitamin A, fiber', 'USA', 'refrigerate', 5);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (9, 'Mango Juice', '2.49', 'orange', 'none', 'regular', '500ml', '500ml', 'shake well before use', 'vitamin C', 'Spain', 'refrigerate', 4);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (10, 'Chicken', '5.99', 'chicken', 'none', 'regular', '1 kg', '1 kg', 'cook thoroughly', 'protein', 'USA', 'refrigerate', 3);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (11, 'Baguette', '1.99', 'wheat flour, yeast', 'gluten', 'regular', '1 piece', '200g', 'cut and serve', 'carbs', 'France', 'room temperature', 2);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (12, 'Ice Cream', '3.99', 'milk, sugar, flavors', 'lactose', 'occasional', '500ml', '500g', 'scoop and serve', 'fat, sugar', 'USA', 'freezer', 1);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (13, 'Shampoo', '4.99', 'water, sodium laureth sulfate, fragrance', 'none', 'regular', '250ml', '250ml', 'apply to wet hair, massage, rinse', 'n/a', 'USA', 'room temperature', 16);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (14, 'Cereal', '3.99', 'corn, sugar, wheat', 'gluten', 'regular', '400g', '400g', 'add milk and enjoy', 'carbs', 'UK', 'room temperature', 13);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (15, 'Tomato', '1.49', 'tomato', 'none', 'regular', '1 piece', '100g', 'wash before eating', 'vitamin C', 'Spain', 'room temperature', 5);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (16, 'Yogurt Drink', '2.29', 'milk, live cultures', 'lactose', 'regular', '250ml', '250ml', 'shake well and drink', 'calcium, probiotics', 'USA', 'refrigerate', 1);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (17, 'Granola Bar', '0.99', 'oats, honey, nuts', 'tree nuts', 'regular', '1 bar', '25g', 'open and consume', 'fiber, protein', 'USA', 'room temperature', 13);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (18, 'Shower Gel', '2.99', 'water, sodium laureth sulfate, fragrance', 'none', 'regular', '500ml', '500ml', 'apply to wet skin, lather, rinse', 'n/a', 'USA', 'room temperature', 16);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (19, 'Pineapple_canned', '3.99', 'Pineapple', 'none', 'regular', '1 piece', '150g', 'wash before eating', 'vitamin C', 'Spain', 'room temperature', 12);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (20, 'Pasta', '1.49', 'durum wheat semolina', 'gluten-free', 'regular', '500g', '500g', 'boil in water', 'carbs', 'Italy', 'room temperature', 9);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (21, 'protein_milk', '2.99', 'milk', 'lactose', 'regular', '1 liter', '1 liter', 'shake well before use', 'calcium', 'USA', 'refrigerate', 1);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (22, 'Potato Chips', '1.99', 'potatoes, vegetable oil, salt', 'none', 'occasional', '150g', '150g', 'open and consume', 'fat', 'USA', 'room temperature', 14);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (23, 'Yogurt', '0.99', 'milk, live cultures', 'lactose', 'regular', '200g', '200g', 'consume directly', 'calcium, probiotics', 'USA', 'refrigerate', 1);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (24, 'Candles', '3.99', 'wax, fragrance', 'none', 'regular', '1 candle', '100g', 'light the wick', 'n/a', 'USA', 'room temperature', 15);
INSERT INTO product (product_id, product_name, product_price, ingredients, allergy_advice, lifestyle, size_volume, net_weight, direction_use, nutrition_info, country_of_origin, storage_instruction, category_id)
VALUES (25, 'Yogurt Drink', '2.29', 'milk, live cultures', 'lactose', 'regular', '250ml', '250ml', 'shake well and drink', 'calcium, probiotics', 'USA', 'refrigerate', 1);

```
pmm_supermarket=# select count(*) from product;
 count
-------
   200
```

3. store_branch

```
INSERT INTO store_branch (branch_id,branch_location)
VALUES (1, 'Waterlooville'),
(2, 'Fareham'),
(3, 'Gosport'),
(4, 'Havant'),
(5, 'Chichester'),
(6, 'Portsmouth');
```

```
pmm_supermarket=# select count(*) from store_branch;
 count
-------
     6
(1 row)
```

4. store

```
INSERT INTO  store (store_id,store_name,store_address,store_postcode,store_phone,store_email,branch_id)
VALUES (1,'buckinghum_pmm', '13 Buckinghum street', 'PO12DS','01846374832', 'pmmbuckinghum@email.com', 1 );
INSERT INTO  store (store_id,store_name,store_address,store_postcode,store_phone,store_email,branch_id)
VALUES (2, 'Hallmart', '39 South Street', 'PO71GO', '01846374832', 'hallmart@email.com', 1 );
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (3, 'Williams & Sons', '15 Williams street', 'PO74DS','01846374834', 'williams-sons@gmail.com', 1 );
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (4, 'Jonest', '16 Jones street', 'PO75DS','01846374835', 'jonesproject@gmail.com',1 );
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (5, 'Smith', '17 Smith street', 'PO76DS','01846374836', 'smithinnovations@gmail.com', 1) ;
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (6, 'Blackstone', '18 Blackstone street', 'PO14DS','01846374837', 'blackstone@gmail.com',  2);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email,branch_id)
VALUES (7, 'Gillman', '19 Gillman street', 'PO14DS','01846374838', 'gillman@gmail.com', 2);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email,branch_id)
VALUES (8, 'Vangirard', '20 Vangirard street', 'PO14DS','01846374839', 'vangirard@gmail.com', 2);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (9, 'Sanchez', '21 Sanchez street', 'PO15DS','01846374840', 'sanchez@gmail.com', 2);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (10, 'Roach', '22 Roach street', 'PO15DS','01846374841', 'roach@gmail.com', 2);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (11, 'Wright', '23 Wright street', 'PO12FS','01846374842', 'wright@gmail.com', 3);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (12, 'Robinson', '24 Robinson street', 'PO124DS','01846374843', 'robinson@gmail.com',3);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (13, 'Weston', '25 Weston street', 'PO12FDS','01846374844', 'weston@gmail.com', 3);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (14, 'Putnam', '26 Putnam street', 'PO12FS','01846374845', 'putnam@gmail.com', 3);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (15, 'Olson', '27 Olson street', 'PO126S','01846374846', 'olson@gmail.com', 3);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (16, 'Smith', '28 Smith street', 'PO97BT','01846374847', 'smith@gmail.com',4);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (17, 'King', '29 King street', 'PO98JS','01846374848', 'king@gmail.com', 4);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (18, 'Clark', '30 Clark street', 'PO99FG','01846374849', 'clark@gmail.com', 4);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (19, 'Lewis', '31 Lewis street', 'PO90HJ','01846374850', 'lewis@gmail.com', 4);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (20, 'Thompson', '32 Thompson street', 'PO91KL','01846374851', 'thompson@gmail.com', 4);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (21, 'Brown', '33 Brown street', 'PO18MI','01846374852', 'brown@gmail.com', 5);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (22, 'White', '34 White street', 'PO18NN','01846374853', 'white@gmail.com',  5);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
```

```
VALUES (23, 'Kennedy', '35 Kennedy street', 'PO19OP','01846374854', 'kennedy@gmail.com', 5);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (24, 'Hunter', '36 Hunter street', 'PO19RQ','01846374855', 'hunter@gmail.com',  5);
INSERT INTO store (store_id, store_name, store_address, store_postcode, store_phone, store_email, branch_id)
VALUES (25, 'Bauer', '37 Bauer street', 'PO20SS','01846374856', 'bauer@gmail.com', 5);
```

```
pmm_supermarket=# select count(*) from store;
 count
-------
    30
(1 row)
```

5. Stock

```
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,1,'22');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,2,'10');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,3,'89');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,4,'74');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,5,'68');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,6,'58');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,7,'37');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,8,'76');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,9,'60');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,10,'44');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,11,'56');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,12,'32');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,13,'23');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,14,'42');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,15,'36');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,16,'67');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,17,'53');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,18,'41');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,19,'59');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,20,'34');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,21,'46');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,22,'57');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,23,'48');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,24,'70');
INSERT INTO stock (store_id,product_id,stock_quantity) VALUES (1,25,'54');
```

```
pmm_supermarket=# select count(*) from stock;
 count
-------
  6000
(1 row)
```

6. manager

```
INSERT INTO  manager (manager_id,manager_position)
VALUES (1, 'Store_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (2, 'Security_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (3, 'Assistant_Store_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (4, 'Operations_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (5, 'Human_Resources_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (6, 'Marketing_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (7, 'Bakery_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (8, 'Deli_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (9, 'Warehouse_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (10, 'Night_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (11, 'Produce_Manager');
INSERT INTO  manager (manager_id,manager_position)
VALUES (12, 'Grocery_Manager');
```

```
pmm_supermarket=# select count(*) from manager;
 count
-------
    12
(1 row)
```

7. department

```
INSERT INTO  department (dep_id,department_category)
VALUES (1, 'Store');
INSERT INTO  department (dep_id,department_category)
VALUES (2, 'Bakery');
INSERT INTO  department (dep_id,department_category)
VALUES (3, 'Produce');
INSERT INTO  department (dep_id,department_category)
VALUES (4, 'Grocery');
INSERT INTO  department (dep_id,department_category)
VALUES (5, 'Warehouse');
INSERT INTO  department (dep_id,department_category)
VALUES (6, 'Deli');
INSERT INTO  department (dep_id,department_category)
VALUES (7, 'Operations');
INSERT INTO  department (dep_id,department_category)
VALUES (8, 'Night');
INSERT INTO  department (dep_id,department_category)
VALUES (9, 'Marketing');
INSERT INTO  department (dep_id,department_category)
VALUES (10, 'Security');
INSERT INTO  department (dep_id,department_category)
VALUES (11, 'HR');
```

```
pmm_supermarket=# select count(*) from department;
 count
-------
    11
(1 row)
```

8. department_manager

```
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (1, 1 );
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (1, 3);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (2, 7);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (3, 11);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (4, 12);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (5, 9);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (6, 8);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (7, 4);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (8, 10);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (9, 6);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (10, 2);
INSERT INTO  department_manager (dep_id,manager_id)
VALUES (11, 5);
```

```
pmm_supermarket=# select count(*) from department_manager;
 count
-------
    12
(1 row)
```

9. staff

```
INSERT INTO  staff
(staff_id,staff_fname,staff_sname,staff_gender,staff_dob,staff_email,staff_phone,staff_address,staff_postcode,staff_role,staff
_contract,staff_wage_hourly,dep_id)
VALUES (1, 'John', 'Doe', 'male','1974/09/28', 'john.doe@email.com', '07012345678', '123 Main St', 'PO1 145', 'stocker' , '25',
25.50, 7);
INSERT INTO  staff
(staff_id,staff_fname,staff_sname,staff_gender,staff_dob,staff_email,staff_phone,staff_address,staff_postcode,staff_role,staff
_contract,staff_wage_hourly,dep_id,manager_id)
VALUES (2, 'Jane', 'Smith', 'female','1983/07/12', 'jane.smith@email.com', '07098765432', '456 Elm St', 'PO1 2G6',
'assistant_manager', '30', 20.00, 1,3);
INSERT INTO  staff
(staff_id,staff_fname,staff_sname,staff_gender,staff_dob,staff_email,staff_phone,staff_address,staff_postcode,staff_role,staff
_contract,staff_wage_hourly,dep_id,manager_id)
VALUES (3, 'Michael', 'Johnson', 'male','1975/03/24', 'michael.johnson@email.com', '07055555555', '789 Oak St', 'PO1
3F57', 'store_manager', '32', 25.30, 1,1);
INSERT INTO  staff
(staff_id,staff_fname,staff_sname,staff_gender,staff_dob,staff_email,staff_phone,staff_address,staff_postcode,staff_role,staff
_contract,staff_wage_hourly,dep_id)
VALUES (4, 'Tim', 'Short', 'male','1998/08/08','Timshort@email.com', '073728463173', '24 Dillionton road', 'PO1 4KK',
'cashier', '35','13.20',7);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob, staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (5, 'Emma', 'Wilson', 'female', '1982/05/30','emma.wilson@email.com', '07011111111', '321 Maple St', 'PO1 45678',
'bakery', '30', 15.00, 2);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (6, 'David', 'Brown', 'male','1996/12/18', 'david.brown@email.com', '07022222222', '654 Pine St', 'PO1 56789',
'bakery', '18', 18.00, 2);
```

```
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (7, 'Olivia', 'lee', 'female','1979/04/20', 'olivia.lee@email.com', '07033333333', '987 Cedar St', 'PO1 67890',
'produce', '20', 10.50, 3);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (8, 'Sophia', 'garcia', 'female','1987/11/03', 'sophia.garcia@email.com', '07055555555', '246 Elm St', 'PO1 89012',
'produce', '19', 11.25, 3);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (9, 'James', 'Jones', 'male', '1974/10/23','james.jones@email.com', '07066666666', '357 Maple St', 'PO1 90123',
'deli', '20', 12.00, 6);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender,staff_dob, staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (10, 'Isabella', 'martinez', 'female','1994/07/13', 'isabella.martinez@email.com', '07077777777', '468 Pine St', 'PO1
01234', 'deli', '32', 12.50, 6);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender,staff_dob, staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (11, 'Olivia', 'Rodriguez', 'female','1985-12-07', 'olivia.rodriguez@email.com', '07077777777', '123 Oak St', 'PO1
2356', 'cashier', '18', 13.50, 7);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender,staff_dob, staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id, manager_id)
VALUES (12, 'mia', 'lopez', 'female','1977-09-25', 'mia.lopez@email.com', '07099999999', '680 Oak St', 'PO1 23456',
'manager_produce', '22', 20.75, 3, 11);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender,staff_dob, staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id, manager_id)
VALUES (13, 'ava', 'hernandez', 'female','1994-06-14', 'ava.hernandez@email.com', '07012121212', '791 Elm St', 'PO1
34567', 'manager_bakery', '19', 19.50, 2, 7);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender,staff_dob, staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id, manager_id)
VALUES (14, 'oliver', 'wilson', 'male','1980-05-03', 'oliver.wilson@email.com', '07023232323', '892 Maple St', 'PO1 45678',
'manager_operation', '22', 21.00, 4, 12);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (15, 'emma', 'Vil', 'female','1992-08-10', 'emma.vil@email.com', '07011111111', '321 Maple St', 'PO1 45678', 'store
manager', '12', 35.00, 1);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (16, 'David', 'Bro', 'male', '1974-02-28', 'david.bro@email.com', '07022222222', '654 Pine St', 'PO1 56789', 'bakery
assistant', '14', 18.00, 2);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (17, 'Olivia', 'Chin', 'female','1986-11-15', 'olivia.chin@email.com', '07033333333', '987 Cedar St', 'PO1 67890',
'clerk', '12', 10.50, 2);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (18, 'william', 'miller', 'male','2001-07-22', 'william.miller@email.com', '07044444444', '135 Oak St', 'PO1 7891',
'assistant', '15', 21.00, 3);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (19, 'Sophia', 'Sol', 'female','1990-04-06', 'sophia.sol@email.com', '07055555555', '246 Elm St', 'PO1 89012', 'clerk',
'12', 11.25, 3);
INSERT INTO staff (staff_id, staff_fname, staff_sname, staff_gender, staff_dob,staff_email, staff_phone, staff_address,
staff_postcode, staff_role, staff_contract, staff_wage_hourly, dep_id)
VALUES (20, 'James', 'Sumer', 'male','1999/09/19', 'james.sumer@email.com', '07066666666', '357 Maple St', 'PO1 90123',
'assistant', '18', 22.00, 1);
```

```
pmm_supermarket=# select count(*) from staff;
 count
-------
   783
(1 row)
```

10. staff_account

```
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (1, 1, 'hcalvie0',
'$2a$04$SunIjJQ0amX99CtRSqPh8eZq25hnduAerPLuVdNQFg65MxgzgCP7u');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (2, 2, 'snoah1',
'$2a$04$mJaYmosSJ4Ujf7TZqmAR3Oi1SLCiimO053JRl8rOUSInPZNBRBECS');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (3, 3, 'pkinkaid2',
'$2a$04$SZvKZSuwH2wdlJxGodjIgupwoTpCJZxxdEK6g7Zc1pk7iZpqj4lEK');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (4, 4, 'wbletsor3',
'$2a$04$dfe6EH1KnCS3Lf9uOCDWZOUCDkPTAkLgYlcEvvcAHTU38k8VTnN12');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (5, 5, 'sjohnys4',
'$2a$04$Sif0SVCMjq7gsJbgkdvPOOF.JYMtUuZm0D8O6QctO5I0wa72wQt.m');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (6, 6, 'csteddall5',
'$2a$04$ka/5ijYyO07ba7idlpy9tez/O7ksDxBXxabgDT5wamx3g2iByniWe');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (7, 7, 'sbeathem6',
'$2a$04$ra7/d/UsOgUz81FKPNWRM.MhI7lwwUHPOIqJ0IxHqK1Pq2fNTkQEO');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (8, 8, 'nskeeles7',
'$2a$04$CHCCclth9uDaW6aCkUwGKeFDhQddGCQuNWIANvZ0SFFNwikUtV38q');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (9, 9, 'astuchberry8',
'$2a$04$QRxjtrydyHRffM42bKMAAe7AbSMJu8k5H/oRwhgYf2LHcShRh.inS');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (10, 10, 'tmccallam9',
'$2a$04$vhFSyn0.38r5h78F2ThZxuQkucQ2nWAZN/2T24xRlnQ5A8weraECa');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (11, 11, 'cbennitta',
'$2a$04$C8ktCKQS49iiv.KalAUKye6yr7DEm9ilE/nGf1ez24s7xDXS4gXdW');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (12, 12, 'thannigerb',
'$2a$04$5.3vbYoO1J0F30ItO0w/leM0gGJ9NCYQXfgGNDecCwTV4gEaSPm66');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (13, 13, 'mchadwenc',
'$2a$04$YtZHkwSEwUPigVoJAyn1SeWg2mxFoJF8WuPNvMiuYVvZccXb4oa8i');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (14, 14, 'ccereceresd',
'$2a$04$sr8S1oZz/6gaCYlgdVUf/.sL0O/1/5cE24Y5X34Ko3Z3CurTxWp6S');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (15, 15, 'moregane',
'$2a$04$wcTH5zXAsdb1HbFx/FCajuo1rPxMdwrm6aYTUacrNSkpsw7sFTsfS');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (16, 16, 'moneilf',
'$2a$04$9536nNU.8/paUtPesMUfZ.3mgs/Fe6kagCYchkceRd9jqbo25NBGi');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (17, 17, 'ebobaschg',
'$2a$04$qEltJtw.a5lpucNkhQsCN.FgaVXKd31gyNQj1txhncGMzhTXXwV.G');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (18, 18, 'walbrechth',
'$2a$04$7l/DCzZkTL7DHQqL/H9dfOz3kMe.277n3u/axltB2pRVexSD01LXC');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (19, 19, 'gcottesfordi',
'$2a$04$VVtF/nqJ/FUIOXuufiLaNeUYFAdzASROjM2Ggxo2HfTNdvG7RWKrG');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (20, 20, 'cabramovitchj',
'$2a$04$gKxpZpnoLHnSzt77BSJv..6pDl9dHEZgqX6ZZW6Z3/lTY6lQT/Pbi');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (21, 21, 'fpaxfordek',
'$2a$04$ZM/btPj2/Mwl56XRHt/vM.csjLFztImNCyZ/hRvYPj6PI6NL8MKmS');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (22, 22, 'kaspinalll',
'$2a$04$w4HpkPJ1A0720424DHW.BeOMcoySEDJTLuLfdeQRJewq63iTEo4Ea');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (23, 23, 'bduggonm',
'$2a$04$MnLIZ/SDksKKcrTuT6NXPe0bU9lJuavWx2cQ108zKsJtGCuqpZeMq');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (24, 24, 'hmartyn',
'$2a$04$8i.S6lVBkyWX8RTQ8CRBluYQqBqvrvnTXatKD3/dO47ue20.WHrcG');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (25, 25, 'equeyoso',
'$2a$04$Au2xnoj4K1UwuviB8Cl1vOEgEs1hj9ztaMg.CzzBpBd6CdHbI/9RG');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (26, 26, 'gridgep',
'$2a$04$S41Eudm5k1aCm6A29t58fONNn7VblTdH0wOBq/eGn6sjZ/XrGx7T.');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (27, 27, 'gwhebellq',
'$2a$04$fZ8xeZPEMA8Ome9d66n7JeRGH4S8Ihw5A4Iw3Qh3wL0OkcSwY/x9m');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (28, 28, 'jcossellr',
'$2a$04$4sf0wRo3BTJk23m0kzulOuUsUdFwRGCJd2LuSriurZ/aoLo8JByIO');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (29, 29, 'pseagraves',
'$2a$04$eR7qljZrYazKOwDEMgxwRO8LvAMR81xBsbDa2Isu6OaR6T6M1Tv/q');
insert into staff_account (staff_account_id, staff_id, staff_username, staff_password) values (30, 30, 'sbreacht',
'$2a$04$L2UUS0nWFhMz6Vj2E7OUHOMgfblhT2bvtA6eT6LYu79RlBY9eeCyS');
```

```
pmm_supermarket=# select count(*) from staff_account;
 count
-------
   783
(1 row)
```

11. shift

```
INSERT INTO shift (shift_id,staff_account_id,store_id,shift_date,start_time,end_time)
VALUES
 (1,3,1,'2024-12-2','7:00:00','16:00:00'),
 (2,21,2,'2024-11-4','8:00:00','14:00:00'),
 (3,75,3,'2024-11-5','10:00:00','17:00:00'),
 (4,65,4,'2024-11-26','11:00:00','14:00:00'),
 (5,83,5,'2024-12-1','13:00:00','22:00:00'),
 (6,91,6,'2024-11-13','7:00:00','18:00:00'),
 (7,99,7,'2024-11-11','10:00:00','19:00:00'),
 (8,107,8,'2024-11-22','11:00:00','16:00:00'),
 (9,116,9,'2024-12-18','11:00:00','14:00:00'),
 (10,129,10,'2024-11-20','9:00:00','17:00:00'),
 (11,139,11,'2024-11-23','8:00:00','19:00:00'),
 (12,149,12,'2024-12-16','10:00:00','21:00:00'),
 (13,159,13,'2024-11-13','7:00:00','14:00:00'),
 (14,169,14,'2024-12-2','11:00:00','20:00:00'),
 (15,179,15,'2024-11-17','13:00:00','15:00:00'),
 (16,189,16,'2024-12-3','8:00:00','19:00:00'),
 (17,199,17,'2024-11-14','13:00:00','20:00:00'),
 (18,209,18,'2024-12-14','12:00:00','17:00:00'),
 (19,219,19,'2024-12-19','7:00:00','21:00:00'),
 (20,229,20,'2024-11-11','9:00:00','18:00:00'),
 (21,239,21,'2024-12-14','10:00:00','14:00:00'),
 (22,249,22,'2024-11-10','11:00:00','15:00:00'),
 (23,259,23,'2024-12-3','13:00:00','17:00:00'),
 (24,42,24,'2024-11-11','8:00:00','16:00:00'),
 (25,55,25,'2024-12-18','10:00:00','14:00:00');
```

```
pmm_supermarket=# select count(*) from shift;
 count
-------
   867
(1 row)
```

12. Customer

```
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (1, 'Phillip', 'Fahy', 'male', '1998/03/11', '868-854-5348', 'pfahy0@unesco.org', '1492 Daystar Avenue', 'PO1RFD');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (2, 'Garrek', 'Bonafacino', 'male', '1985/12/05', '946-316-9971', 'gbonafacino1@netvibes.com', '5 Ridge Oak Lane',
'PO12BD');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (3, 'Krisha', 'Fryd', 'male', '1993/11/01', '435-660-3599', 'kfryd2@feedburner.com', '2422 Twin Pines Park', 'PO10ST');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (4, 'Feodora', 'Johansson', 'female', '1982/03/11', '223-356-1814', 'fjohansson3@addthis.com', '72 Katie Point',
'PO18OP');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (5, 'Stafani', 'Brownsworth', 'female', '1987/12/23', '982-633-7983', 'sbrownsworth4@bloomberg.com', '12866 Rigney
Avenue', 'PO17MN');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (6, 'Joan', 'Fearnley', 'female', '1996/06/13', '704-376-7908', 'jfearnley5@twitpic.com', '83 Sunbrook Road', 'PO16KL');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (7, 'Brigham', 'Stickler', 'male', '1989/09/02', '801-187-5763', 'bstickler6@purevolume.com', '57511 Clove Plaza',
'PO14GH');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (8, 'Martelle', 'Ivatts', 'female', '1990/03/16', '833-242-7969', 'mivatts7@japanpost.jp', '1 Dahle Court', 'PO15IJ');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (9, 'Julieta', 'Bruhnicke', 'female', '1992/03/05', '646-151-5688', 'jbruhnicke8@webnode.com', '447 Myrtle Parkway',
```

```
'PO13EF');
INSERT INTO  customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
values (10, 'Lewes', 'Self', 'male', '1998/06/12', '611-864-3572', 'lself9@disqus.com', '0908 Old Shore Junction', 'PO19QR');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (11, 'Beth', 'Watson', 'female', '1995/03/15', '123-456-7890', 'beth.watson@example.com', '456 Redwood Avenue',
'PO12345');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (12, 'John', 'Smith', 'male', '1987/09/22', '555-555-5555', 'john.smith@example.com', '789 Maple Lane', 'PO17890');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (13, 'Emily', 'Johnson', 'female', '2000/01/10', '987-654-3210', 'emily.johnson@example.com', '234 Cedar Road',
'PO15432');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (14, 'David', 'Brown', 'male', '1992/07/18', '111-111-1111', 'david.brown@example.com', '567 Oak Street',
'PO19876');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (15, 'Sarah', 'Taylor', 'female', '1989/12/03', '222-222-2222', 'sarah.taylor@example.com', '890 Elm Avenue',
'PO16543');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (16, 'Michael', 'Walker', 'male', '1994/04/27', '333-333-3333', 'michael.walker@example.com', '123 Pine Lane',
'PO11223');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (17, 'Jessica', 'Miller', 'female', '1997/08/06', '444-444-4444', 'jessica.miller@example.com', '456 Walnut Street',
'PO17890');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (18, 'Daniel', 'Turner', 'male', '1985/02/14', '555-555-5555', 'daniel.turner@example.com', '789 Hickory Lane',
'PO19876');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (19, 'Amy', 'Clark', 'female', '1990/10/20', '666-666-6666', 'amy.clark@example.com', '234 Willow Road',
'PO15432');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (20, 'Mark', 'Roberts', 'male', '1988/05/08', '777-777-7777', 'mark.roberts@example.com', '567 Birch Avenue',
'PO16543');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (21, 'Laura', 'Anderson', 'female', '1993/06/25', '07-123-456789', 'laura.anderson@example.com', '123 Oak Street',
'PO19876');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (22, 'Christopher', 'Harris', 'male', '1986/04/12', '07-987-654321', 'christopher.harris@example.com', '456 Elm
Avenue', 'PO16543');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (23, 'Lucy', 'Wilson', 'female', '1997/09/03', '07-555-555555', 'lucy.wilson@example.com', '789 Pine Lane',
'PO11223');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (24, 'Adam', 'Thompson', 'male', '1991/12/08', '07-222-222222', 'adam.thompson@example.com', '234 Maple
Road', 'PO17890');
INSERT INTO customer(customer_id,c_fname,c_sname,c_gender,c_dob,c_phone,c_email,c_address,c_postcode)
VALUES (25, 'Sophie', 'Davies', 'female', '1988/03/17', '07-333-333333', 'sophie.davies@example.com', '567 Cedar Lane',
'PO15432');
```

```
pmm_supermarket=# select count(*) from customer;
 count
-------
    50
(1 row)
```

13. customer_account

```
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (1, 1, 'loppie0',
'$2a$04$E4SwdiqbSwBFMkzHY6p/BeTFXY5xShcwLwjDcDHMJwvXl5cn3icxC', 'ohoyt0@pcworld.com', '2020-06-21', 350,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (2, 2, 'ijennions1',
'$2a$04$0aZOj/Gia.BIwYPiLiQsuOTjsfagArYwfwD0aG75Zp7I/8W/4B4Pu', 'nprowse1@zimbio.com', '2020-04-09', 1000,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (3, 3, 'doclery2',
'$2a$04$1vPrkIzW4krTTlfTQIkF5eyyNYGWCt2PSdtSuCDesvB7i0R/JjpLK', 'hensten2@independent.co.uk', '2019-10-01',
10000, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (4, 4, 'ycarlisle3',
'$2a$04$XiWnixvKj6H6TxI6kEHwb.whe.t/7bU6/DrphuyMZNWuSUhLZWq6m', 'aamberson3@csmonitor.com', '2021-11-01',
1, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (5, 5, 'ahaythorn4',
'$2a$04$iDNGvBfdIoVjVxa/y4G.ZesF5GmZDatj5nvNFW2wLtU6rONT53D72', 'kborland4@acquirethisname.com',
'2020-05-21', 10000, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (6, 6, 'wamerighi5',
'$2a$04$ZcIDHqjfDMk1DYnC6IHaGuGBpIbXke4RsqkzQHzAKBupshD/p/efO', 'hrappa5@is.gd', '2021-12-16', 300, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (7, 7, 'dpeschmann6',
'$2a$04$hsY4IiAtsquLofwv2v2yLeIh38.vrWhVb9TLa0BqjqP3kGn1ObHam', 'jcortes6@facebook.com', '2022-04-16', 350,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (8, 8, 'mdubock7',
'$2a$04$v4OSS3ng9q9JIxPxUS1ymeJwN/mhXg4bhrKzroALdqTYcHQzrdJP.', 'lberling7@digg.com', '2019-09-02', 700,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (9, 9, 'dfidock8',
'$2a$04$n3FoI6fHat3So6d5.nvM.O.DqgPjCYP72zYHd9rbwSImMSOpj27x6', 'kmuro8@mtv.com', '2018-11-29', 0, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (10, 10, 'rquadri9',
'$2a$04$SULNlBhRnthz.l6CKpFPgO3ZtcrdBlvgVHH8BYPfXsLwyl18rF7si', 'ebonifacio9@shinystat.com', '2021-09-27', 100,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (11, 11, 'svaughtena',
'$2a$04$hpgOVXfIeO08JEo5n6H.5OzG/Nc2o0w1o4Hn5e4Q1TJ1vvyj7mQ.G', 'jgerardeta@ifeng.com', '2020-06-14', 300,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (12, 12, 'sandreottib',
'$2a$04$cZqXG11zCBgV5HQRplMyB.rsTshylZBYYE.XTYy0gIvTSS4gxFn.G', 'wbloodb@disqus.com', '2022-09-14', 200,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (13, 13, 'asteelc',
'$2a$04$Xf5XeR.yZJ40hgrUJNmIT.QK/Mw/LSyP20k9qesrr1t6ypr1GtIO6', 'wevangelinosc@icq.com', '2022-06-10', 10000,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (14, 14, 'lvernerd',
'$2a$04$bA/0EPhMGbuQlh6jW0XYVO82wi.2W4M4SdUokCO09yjUouvZW07qW', 'aelderd@oracle.com', '2019-11-09', 350,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (15, 15, 'mhapkee',
'$2a$04$GiaeOG9hpNzG3YXa5U7kSuo19Tyqiwo9.M4MotrHtdp7RlnegAUxy', 'mshiele@google.com.au', '2019-05-28', 300,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (16, 16, 'virvingf',
'$2a$04$KU.rKJMLYDxBafFHvDdqUeJfxirMabRwCJbmDdvMVHOom7BwMqqa2', 'fberefordf@scientificamerican.com',
'2020-05-14', 0, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (17, 17, 'lschoenleiterg',
'$2a$04$Fu8.5xEdLgMWNeIN/YgKi.9yhhOIUEJUJgaLre1VOgLWUJ4uC4Pta', 'frosenhausg@gmpg.org', '2019-09-16', 200,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (18, 18, 'ccutmereh',
'$2a$04$8434nzp2Yey69kc4h88eN.H0vIyVYKTA20L59aSTJjdLUxOVz9/uq', 'hgrzelakh@dyndns.org', '2019-09-03', 10000,
'active');
```

```
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (19, 19, 'dcarefulli',
'$2a$04$cTVPwJfBThFvlG2AKSFxJe52vt8lzDzxGolHX8rVBh/4zcxXnUmT2', 'adibbini@amazon.de', '2022-09-02', 100,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (20, 20, 'rwhitesidej',
'$2a$04$T/Lvr79JvrEk1whNI3AXJ.bEDAw9AUN2gre0I1L/sXwriEXeMIjDi', 'lgumbyj@squidoo.com', '2021-11-27', 10000,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (21, 21, 'wwaudk',
'$2a$04$/gVwSbfScqUHgM7bkOWUw.gOnN3tm68g02pEEIzRi0RxqBR6aiVH2', 'shaillk@wikipedia.org', '2022-09-15', 1,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (22, 22, 'rlegonidecl',
'$2a$04$GfVs05COh7fSQKLhGf.DxuG0mswDqYYiNYt2d6K7/NpB8UM6iJN02', 'fdoyleyl@wired.com', '2022-03-22', 200,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (23, 23, 'itookm',
'$2a$04$NrXM5ZGqb.KyGWvTGWkRbe71ngFyhFrwkmilPR26PyECAiOkXOJ0u', 'dmacronaldm@github.io', '2022-05-06',
10000, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (24, 24, 'eshaveln',
'$2a$04$6I.xuziaihqXT5n7GyUaYOPr6H8k9jUF3VTlvP2a3DC94p43rwl4e', 'egeaneyn@skype.com', '2019-12-26', 700,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (25, 25, 'bcasarolio',
'$2a$04$o0MrWaRBmO8YRqruA82oleT6eHO7q9cfY.BDMHZekXMGFkh4rMcr2', 'ofugereo@examiner.com', '2020-02-23',
200, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (26, 26, 'kmanfordp',
'$2a$04$jnzf.H8TUeha6ag8W3mh7.S87Rev5oaUd.VzXQiqOXd5l/.qcra.a', 'bkeanep@columbia.edu', '2022-09-07', 0,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (27, 27, 'ftrowlerq',
'$2a$04$7cB60GXN.LZ2tfwTcaJXqejB/2m6wEF.BFaPThnQkMVK2Xz8SbxkS', 'eadamolliq@xrea.com', '2021-05-16', 1000,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (28, 28, 'kaldingtonr',
'$2a$04$NPQYxTlH74UEUkTR1f96cOQ9z.OdRxUUesbdhHLGd7ADD8BODUgm6', 'adepperr@constantcontact.com',
'2021-10-13', 300, 'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (29, 29, 'urollss',
'$2a$04$k4gZ2GCvHtqDStnhd0vQw.7TSN4uhdDDPCHACfitKM.rAikKm97au', 'tleans@newyorker.com', '2022-04-17', 6,
'active');
insert into customer_account  (user_id, customer_id, user_name, user_password, user_email, registration_date,
loyalty_points, account_status) values (30, 30, 'jtippingst',
'$2a$04$hb3lpryDb4QDBo9mSibPLOWK4QReO6xpNU5fzts.Hb2GVlCTXZ4CW', 'yruburyt@nature.com', '2022-10-11', 700,
'active');
```

```
pmm_supermarket=# select count(*) from customer_account;
 count
-------
    50
(1 row)
```

14. anonymous _customer

```
INSERT INTO anonymous_customer(anonymous_id)
VALUES(1 );
INSERT INTO anonymous_customer(anonymous_id)
VALUES(2);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(3);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(4);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(5);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(6);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(7);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(8);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(9);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(10);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(11);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(12);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(13);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(14);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(15);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(16);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(17);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(18);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(19);
INSERT INTO anonymous_customer(anonymous_id)
VALUES(20);
```

```
pmm_supermarket=# select count(*) from anonymous_customer;
 count
-------
    65
(1 row)
```

15. customer_order

```
INSERT INTO
customer_order(order_id,user_id,anonymous_id,store_id,product_id,order_quantity,order_type,order_date,order_status,ship
ping_address,payment_status,payment_method)
VALUES (1,1,NULL,1,1,3,'delivery','2017-05-20 12:53:48','pending','23 Devenstone road','completed','credit');

INSERT INTO
customer_order(order_id,user_id,anonymous_id,store_id,product_id,order_quantity,order_type,order_date,order_status,ship
ping_address,payment_status,payment_method)
VALUES (2,1,NULL, 1,2,3,'delivery','2017-03-26 04:21:21','pending','23 Devenstone road','completed','credit');

INSERT INTO
customer_order(order_id,user_id,anonymous_id,store_id,product_id,order_quantity,order_type,order_date,order_status,ship
ping_address,payment_status,payment_method)
VALUES (3,1,NULL, 1,1,10,'delivery','2017-01-09 15:26:23','pending','23 Devenstone road','pending','credit');

INSERT INTO
customer_order(order_id,user_id,anonymous_id,store_id,product_id,order_quantity,order_type,order_date,order_status,ship
ping_address,payment_status,payment_method)
VALUES (4,1,NULL, 1,2,40,'delivery','2017-01-09 15:26:23','pending','23 Devenstone road','pending','credit');

INSERT INTO
customer_order(order_id,user_id,anonymous_id,store_id,product_id,order_quantity,order_type,order_date,order_status,ship
ping_address,payment_status,payment_method)
VALUES (5,1,NULL,1,2,2,'delivery','2017-01-09 15:26:23','pending','23 Devenstone road','pending','credit');

INSERT INTO
customer_order(order_id,user_id,anonymous_id,store_id,product_id,order_quantity,order_type,order_date,order_status,ship
ping_address,payment_status,payment_method)
VALUES (6,NULL,1,1,2,2,'in-store','2020-01-09 11:16:26','completed','NULL','completed','cash');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (7, 2, NULL, 3, 1, 5, 'delivery', '2021-05-18 09:45:12', 'pending', '45 Oak Street', 'pending', 'credit');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (8, 1, NULL, 2, 3, 3, 'in-store', '2022-03-27 13:12:59', 'completed', 'NULL', 'completed', 'cash');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (9, 3, NULL, 2, 1, 4, 'delivery', '2022-06-10 17:32:45', 'pending', '88 Maple Avenue', 'pending', 'credit');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (10, 4, NULL, 3, 2, 3, 'in-store', '2022-09-02 09:15:28', 'completed', 'NULL', 'completed', 'cash');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (11, 5, NULL, 1, 3, 1, 'delivery', '2021-11-15 14:20:36', 'pending', '1095 Elm Street', 'pending', 'credit');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (12, 6, NULL, 3, 1, 2, 'in-store', '2022-02-20 11:45:19', 'completed', 'NULL', 'completed', 'cash');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (13, 7, NULL, 2, 2, 3, 'delivery', '2022-07-05 16:55:10', 'pending', '215 Oak Street', 'pending', 'credit');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (14, 8, NULL, 1, 1, 5, 'in-store', '2022-04-14 10:28:52', 'completed', 'NULL', 'completed', 'cash');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (15, 9, NULL, 2, 3, 2, 'delivery', '2022-08-18 12:07:36', 'pending', '3927 Elmwood Avenue', 'pending', 'credit');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (16, 10, NULL, 1, 1, 4, 'in-store', '2021-12-23 08:50:19', 'completed', 'NULL', 'completed', 'cash');
```

```
INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (17, 11, NULL, 2, 2, 3, 'delivery', '2022-10-30 15:35:28', 'pending', '1136 Maple Avenue', 'pending', 'credit');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (18, 21, NULL, 1, 3, 1, 'in-store', '2022-01-07 13:02:13', 'completed', 'NULL', 'completed', 'cash');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (19, 22, NULL, 3, 2, 2, 'delivery', '2022-11-12 11:25:18', 'pending', '789 Oakwood Lane', 'pending', 'credit');

INSERT INTO customer_order(order_id, user_id, anonymous_id, store_id, product_id, order_quantity, order_type,
order_date, order_status, shipping_address, payment_status, payment_method)
VALUES (20, 23, NULL, 1, 1, 3, 'in-store', '2021-10-23 09:18:32', 'completed', 'NULL', 'completed', 'cash');
```

```
pmm_supermarket=# select count(*) from customer_order;
 count
-------
   698
(1 row)
```