Tables:

I.   Management

Column Name	Datatype
🔑 m_id	INT
🔷 m_name	VARCHAR(45)
🔷 m_address	VARCHAR(45)
🔶 m_shoop	INT

II.   Shop

Column Name	Datatype
🔑 shop_id	INT
🔷 s_name	VARCHAR(45)
🔷 s_number	VARCHAR(45)
🔷 s_address	VARCHAR(45)
🔶 s_menus	INT
🔷 s_trans	INT
🔷 s_cus	INT

III. Customer

Column Name	Datatype
🔑 cus_is	INT
🔷 cus_name	VARCHAR(45)
🔷 cus_number	VARCHAR(45)
🔷 cus_email	VARCHAR(45)

IV.   Menus

Column Name	Datatype
🔑 man_id	INT
🔷 man_name	VARCHAR(45)
🔷 man_price	VARCHAR(45)

V.   Transaction .

Column Name	Datatype
🔑 tid	INT
🔷 t_mode	VARCHAR(45)
🔷 t_date	VARCHAR(45)

Creating Database :

```
mysql> create database csms_db
    -> ;
Query OK, 1 row affected (0.03 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| company            |
| csms_db            |
| hms_db             |
| information_schema |
| mysql              |
| performance_schema |
| sms_db             |
| test               |
| vhs_db             |
+--------------------+
9 rows in set (0.01 sec)

mysql>
```

Creating a table:

1 . management

```
CREATE TABLE `csms_db`.`management` (
  `m_id` INT NOT NULL,
  `m_name` VARCHAR(45) NOT NULL,
  `m_address` VARCHAR(45) NOT NULL,
  `m_shoop` INT NOT NULL,
  PRIMARY KEY (`m_id`));

ALTER TABLE `csms_db`.`management`
DROP COLUMN `menu_id`,
ADD INDEX `s_id_idx` (`s_id` ASC) VISIBLE,
ADD INDEX `t_id_idx` (`t_id` ASC) VISIBLE;
;
ALTER TABLE `csms_db`.`management`
ADD CONSTRAINT `s_id`
  FOREIGN KEY (`s_id`)
  REFERENCES `csms_db`.`shop` (`s_id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
ADD CONSTRAINT `t_id`
  FOREIGN KEY (`t_id`)
  REFERENCES `csms_db`.`tranaction` (`tid`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION;
```

2. Shop

```sql
CREATE TABLE `csms_db`.`shop` (
  `shop_id` INT NOT NULL,
  `s_name` VARCHAR(45) NOT NULL,
  `s_number` VARCHAR(45) NOT NULL,
  `s_address` VARCHAR(45) NOT NULL,
  `s_menus` INT NOT NULL,
  PRIMARY KEY (`shop_id`));


ALTER TABLE `csms_db`.`shop`
ADD COLUMN `s_trans` INT NULL AFTER `s_menus`,
ADD INDEX `trans_id_idx` (`s_trans` ASC) VISIBLE;
;
ALTER TABLE `csms_db`.`shop`
ADD CONSTRAINT `trans_id`
  FOREIGN KEY (`s_trans`)
  REFERENCES `csms_db`.`transaction` (`tid`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION;

ALTER TABLE `csms_db`.`shop`
ADD COLUMN `s_cus` INT NULL AFTER `s_trans`,
ADD INDEX `cus_id_idx` (`s_cus` ASC) VISIBLE;
;
ALTER TABLE `csms_db`.`shop`
ADD CONSTRAINT `cus_id`
  FOREIGN KEY (`s_cus`)
  REFERENCES `csms_db`.`customer` (`cus_is`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION;


ALTER TABLE `csms_db`.`shop`
ADD INDEX `men_id_idx` (`s_menus` ASC) VISIBLE;
;
ALTER TABLE `csms_db`.`shop`
ADD CONSTRAINT `men_id`
  FOREIGN KEY (`s_menus`)
  REFERENCES `csms_db`.`menus` (`man_id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION;
```

```
ALTER TABLE `csms_db`.`shop`
ADD COLUMN `s_m_id` INT NULL AFTER `s_cus`,
ADD INDEX `man_id_idx` (`s_m_id` ASC) VISIBLE;
;
ALTER TABLE `csms_db`.`shop`
ADD CONSTRAINT `man_id`
  FOREIGN KEY (`s_m_id`)
  REFERENCES `csms_db`.`management` (`m_id`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION;
```

3. Customer

```
CREATE TABLE `csms_db`.`customer` (
  `cus_is` INT NOT NULL,
  `cus_name` VARCHAR(45) NOT NULL,
  `cus_number` VARCHAR(45) NOT NULL,
  `cus_email` VARCHAR(45) NOT NULL,
  PRIMARY KEY (`cus_is`));
```

4. Menus

```
CREATE TABLE `csms_db`.`menus` (
  `man_id` INT NOT NULL,
  `man_name` VARCHAR(45) NOT NULL,
  `man_price` VARCHAR(45) NOT NULL,
  PRIMARY KEY (`man_id`));
```

5. Transaction

```
CREATE TABLE `csms_db`.`transaction` (
  `tid` INT NOT NULL,
  `t_mode` VARCHAR(45) NOT NULL,
  `t_date` VARCHAR(45) NOT NULL,
  PRIMARY KEY (`tid`));
```

5. CRUD Operations

Inserting data into the table:
i. Menus

```sql
INSERT INTO `csms_db`.`menus` (`man_id`, `man_name`, `man_price`) VALUES ('201', 'coffee', '50');
INSERT INTO `csms_db`.`menus` (`man_id`, `man_name`, `man_price`) VALUES ('202', 'coldCoffee', '150');
INSERT INTO `csms_db`.`menus` (`man_id`, `man_name`, `man_price`) VALUES ('203', 'ChocolateCoffee', '200')
```

ii. Transaction

```sql
INSERT INTO `csms_db`.`transaction` (`tid`, `t_mode`, `t_date`) VALUES ('101', 'cash', '19-01-2024');
INSERT INTO `csms_db`.`transaction` (`tid`, `t_mode`, `t_date`) VALUES ('102', 'gpay', '19-01-2024');
INSERT INTO `csms_db`.`transaction` (`tid`, `t_mode`, `t_date`) VALUES ('103', 'card', '19-01-2024');
```

iii . shop

```sql
INSERT INTO `csms_db`.`shop` (`shop_id`, `s_name`, `s_number`, `s_address`, `s_menus`) VALUES ('301', 'coffeeDay', '98765432', 'anna_nagar', '202');
```

iv. Management :

```sql
INSERT INTO `csms_db`.`management` (`m_id`, `m_name`, `m_address`, `m_shoop`) VALUES ('401', 'BussinessPlanners', 'chennai', '301');
```

V . customers

```sql
INSERT INTO `csms_db`.`customer` (`cus_is`, `cus_name`, `cus_number`, `cus_email`) VALUES ('501', 'kirubakaran', '8765433456', 'kiru@gmail.com');
INSERT INTO `csms_db`.`customer` (`cus_is`, `cus_name`, `cus_number`, `cus_email`) VALUES ('502', 'srinivasan', '345678987', 'sri@gmail.com');
INSERT INTO `csms_db`.`customer` (`cus_is`, `cus_name`, `cus_number`, `cus_email`) VALUES ('503', 'hemz', '9876543345', 'hemz@gmail.com');
```

Updating the table:

Shop :

```sql
UPDATE `csms_db`.`shop` SET `s_trans` = '101', `s_cus` = '501' WHERE (`shop_id` = '301');
```

Management :

```sql
UPDATE `csms_db`.`management` SET `m_address` = 'Banglore' WHERE (`m_id` = '402');
UPDATE `csms_db`.`management` SET `m_address` = 'Chennai' WHERE (`m_id` = '401');
```

Transactions:

```sql
UPDATE `csms_db`.`transaction` SET `t_mode` = 'QR' WHERE (`tid` = '102');
```

Customer:

```
mysql> update customer set cus_name = 'hemachandran' where cus_is=503;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

Menus :

```
mysql> update menus set man_price = 100 where man_id=201;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

Deleting the data in the table:

Customer:

```sql
DELETE FROM `csms_db`.`customer` WHERE (`cus_is` = '503');
```

Transactions :

```sql
DELETE FROM `csms_db`.`transaction` WHERE (`tid` = '104');
```

Menus :

```sql
DELETE FROM `csms_db`.`menus` WHERE (`man_id` = '204');
```

Management :

```sql
DELETE FROM `csms_db`.`management` WHERE (`m_id` = '403');
```

Shop :

```sql
DELETE FROM `csms_db`.`shop` WHERE (`shop_id` = '303');
```