```
### Database Creation ###
CREATE DATABASE tp_sql;
USE tp_sql;
### Tables Creation ###
CREATE TABLE prestation (
    prestation_id INT NOT NULL AUTO_INCREMENT,
    prestation_type VARCHAR(255) NOT NULL,
    PRIMARY KEY(prestation id)
);
CREATE TABLE categorie (
    categorie_id INT NOT NULL AUTO_INCREMENT,
    categorie_libelle VARCHAR(255) NOT NULL,
    PRIMARY KEY(categorie_id)
);
CREATE TABLE carte (
    carte_id VARCHAR(10) NOT NULL,
    carte_nom VARCHAR(255) NOT NULL,
    categorie_id INT NOT NULL,
    carte caution INT NOT NULL,
    carte date DATE NOT NULL,
    PRIMARY KEY(carte_id),
    FOREIGN KEY(categorie_id) REFERENCES categorie(categorie_id)
);
CREATE TABLE ticket (
    ticket id VARCHAR(10) NOT NULL,
    carte id VARCHAR(10) NOT NULL,
    ticket date DATE NOT NULL,
    PRIMARY KEY(ticket_id),
    FOREIGN KEY(carte id) REFERENCES carte(carte id)
CREATE TABLE tarif (
    prestation_id INT NOT NULL,
    categorie_id INT NOT NULL,
    tarif prix DECIMAL(10, 2) NOT NULL,
    PRIMARY KEY(prestation_id, categorie_id),
    FOREIGN KEY(prestation_id) REFERENCES prestation(prestation_id),
    FOREIGN KEY(categorie id) REFERENCES categorie(categorie id)
);
CREATE TABLE depot (
    carte id VARCHAR(10) NOT NULL,
    depot date DATE NOT NULL,
    depot montant INT NOT NULL,
    PRIMARY KEY(carte id, depot date),
```

```
FOREIGN KEY(carte_id) REFERENCES carte(carte_id)
);
CREATE TABLE achat (
    ticket_id VARCHAR(10) NOT NULL,
    prestation_id INT NOT NULL,
    achat_nombre INT NOT NULL,
    PRIMARY KEY(ticket_id, prestation_id),
    FOREIGN KEY(ticket id) REFERENCES ticket(ticket id),
    FOREIGN KEY(prestation id) REFERENCES prestation(prestation id)
);
### Insert Values ###
INSERT INTO prestation (prestation.prestation_type)
VALUES
("Plat principal"),
("Plat + Dessert"),
("Entrée + Plat"),
("Supplément Entrée"),
("Supplément dessert"),
("Repas complet"),
("Alcool"),
("Apéritif"),
("Soda");
INSERT INTO categorie (categorie.categorie_libelle)
("Petits revenus"),
("Revenus moyens"),
("Gros revenus"),
("Visiteurs");
INSERT INTO carte (carte.carte_id, carte.carte_nom, carte.categorie_id,
carte.carte caution, carte.carte date)
VALUES
("C1", "Nina Mcdowell", 3, 6, "2022-08-27"),
("C2", "Murphy Lane", 2, 9, "2022-08-15"),
("C3", "Hillary Garza", 2, 7, "2022-09-07"),
("C4", "Ciaran Ball", 3, 6, "2022-09-11"),
("C5", "Kirsten Norton", 3, 7, "2022-09-28"),
("C6", "Abdul Weiss", 3, 9, "2022-09-19"),
("C7", "Rinah Reilly", 1, 8, "2022-09-11"),
("C8", "Kimberly Bryan", 3, 9, "2022-09-17"),
("C9", "Galena Keller", 4, 7, "2022-08-16"),
("C10", "Francesca Briggs", 2, 9, "2022-08-16"),
("C11", "Abdul Weiss", 2, 9, "2022-09-19"),
("C12", "Rinah Reilly", 1, 8, "2022-09-11"),
("C13", "Kimberly Bryan", 1, 9, "2022-09-17"),
```

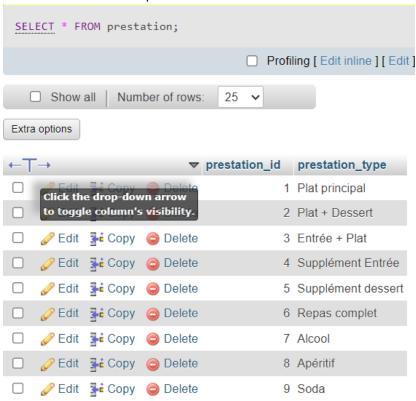
```
("C14", "Galena Keller", 1, 7, "2022-08-16"),
("C15", "Francesca Briggs", 1, 9, "2022-08-16");
INSERT INTO ticket (ticket.ticket_id, ticket.carte_id, ticket.ticket_date)
VALUES
("T01", "C1", "2022-10-03"),
("T02", "C1", "2022-10-05"),
("T03", "C1", "2022-10-10"),
("T04", "C1", "2022-10-11"),
("T05", "C1", "2022-11-02"),
("T06", "C2", "2022-10-11"),
("T07", "C2", "2022-10-13"),
("T08", "C2", "2022-11-02"),
("T09", "C2", "2022-11-10"),
("T10", "C2", "2022-11-14"),
("T11", "C3", "2022-10-11"),
("T12", "C3", "2022-11-20"),
("T13", "C3", "2022-10-24"),
("T14", "C4", "2022-11-02"),
("T15", "C4", "2022-11-14"),
("T16", "C4", "2022-11-24"),
("T17", "C4", "2022-12-12"),
("T18", "C6", "2022-12-27"),
("T19", "C6", "2022-11-14"),
("T20", "C7", "2022-12-19"),
("T21", "C7", "2022-11-22"),
       , "C7", "2022-11-10"),
("T23", "C7", "2022-11-08"),
("T24", "C7",
             , "2022-10-12"),
("T25", "C8", "2022-11-22"),
("T26", "C8", "2022-10-18"),
("T27", "C9", "2022-12-19"),
("T28", "C9", "2022-11-22"),
("T29", "C10", "2022-10-20"),
("T30", "C10", "2022-10-17"),
("T31", "C10", "2022-10-14"),
("T32", "C12", "2022-12-08"),
("T33", "C12", "2022-11-23"),
("T34", "C12", "2022-11-21"),
("T35", "C12", "2022-10-19"),
("T36", "C13", "2022-11-23"),
("T37", "C13", "2022-11-15"),
("T38", "C14", "2022-10-12"),
("T39", "C14", "2022-09-21"),
("T40", "C15", "2022-09-01");
INSERT INTO tarif (tarif.prestation_id, tarif.categorie_id, tarif.tarif_prix)
VALUES
(1, 1, 2.50),
```

```
(1, 2, 2.70),
(1, 3, 3.10),
(1, 4, 5.00),
(2, 1, 3.10),
(2, 2, 3.80),
(2, 3, 4.50),
(2, 4, 7.00),
(3, 1, 2.90),
(3, 2, 3.10),
(3, 3, 3.70),
(3, 4, 6.50),
(4, 1, 0.20),
(4, 2, 0.40),
(4, 3, 0.90),
(4, 4, 1.20),
(5, 1, 0.10),
(5, 2, 0.30),
(5, 3, 0.70),
(5, 4, 1.10),
(6, 1, 3.80),
(6, 2, 4.00),
(6, 3, 4.30),
(6, 4, 9.00),
(7, 1, 1.20),
(7, 2, 1.30),
(7, 3, 1.50),
(7, 4, 2.00),
(8, 1, 1.30),
(8, 2, 1.40),
(8, 3, 1.60),
(8, 4, 2.10),
(9, 1, 0.80),
(9, 2, 0.90),
(9, 3, 1.00),
(9, 4, 2.30);
INSERT INTO depot (depot.carte_id, depot.depot_date, depot.depot_montant)
VALUES
("C1", "2022-09-01", 5),
("C1", "2022-10-13", 30),
("C10", "2022-08-18", 5),
("C10", "2022-09-01", 25),
("C10", "2022-09-14", 30),
("C10", "2022-10-14", 25),
("C12", "2022-09-14", 80),
("C12", "2022-09-16", <mark>30</mark>),
("C13", "2022-09-23", 40),
("C13", "2022-10-01", 20),
("C14", "2022-08-17", 20),
```

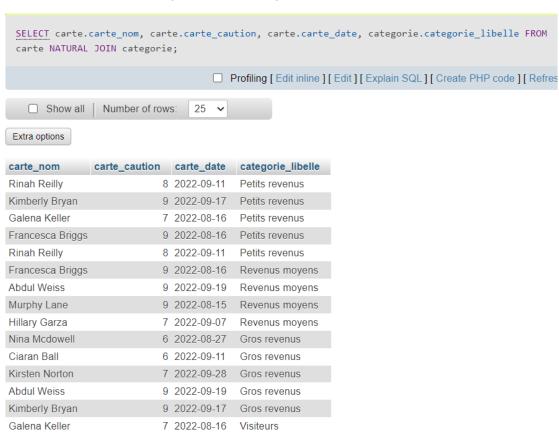
```
("C14", "2022-09-14", 30),
("C15", "2022-08-18", 30),
("C15", "2022-09-23", 30),
("C15", "2022-12-01", 45),
("C2", "2022-09-05", 20),
("C2", "2022-09-07", 30),
("C2", "2022-11-03", 15),
("C3", "2022-09-10", 40),
("C4", "2022-09-12", 20),
("C4", "2022-10-03", 30),
("C6", "2022-09-23", 60),
("C7", "2022-09-14", 5),
("C7", "2022-10-05", 20),
("C7", "2022-11-14", 30),
("C8", "2022-09-22", 20),
("C8", "2022-09-30", 30),
("C9", "2022-08-20", 5),
("C9", "2022-09-02", 20);
INSERT INTO achat (achat.ticket_id, achat.prestation_id, achat.achat_nombre)
VALUES
("T01", 1, 1),
("T01", 7, 2),
("T02", 1, 1),
("T02", 4, 2),
("T02", 9, 3),
("T03", 6, 1),
("T03", 8, 1),
("T04", 1, 1),
("T04", 4, 2),
("T04", 7, 1),
("T05", 6, 3),
("T06", 3, 1),
("T07", 2, 3),
("T08", 1, 2),
("T08", 7, 3),
("T09", 1, 1),
("T09", 5, 2),
("T09", 8, 3),
("T10", 1, 1),
("T10", 9, 4),
("T11", 3, 1),
("T11", 7, 2),
("T12", 1, 2),
("T12", 4, 3),
("T13", 9, 4),
("T14", 6, 4),
("T15", 2, 1),
("T15", 7, 3),
```

```
("T15", 8, 2),
("T16", 2, 1),
("T16", 9, 2),
("T17", 6, 2),
("T18", 6, 1),
("T19", 1, 2),
("T19", 9, 4),
("T20", 6, 2),
("T21", 1, 3),
("T21", 8, 3),
("T22", 2, 1),
("T22", 7, 1),
("T22", 8, 1),
("T23", 6, 2),
("T24", 1, 3),
("T25", 3, 2),
("T25", 9, 2),
("T26", 6, 1),
("T27", 2, 1),
("T27", 7, 2),
("T28", 6, 4),
("T29", 3, 3),
("T29", 9, 3),
("T30", 1, 1),
("T30", 7, 1),
("T30", 9, 1),
("T31", 6, 1),
("T32", 2, 1),
("T33", 3, 2),
("T34", 6, 1),
("T34", 7, 1),
("T35", 3, 1),
("T35", 7, 2),
("T36", 6, 1),
("T37", 3, 1),
("T37", 8, 2),
("T38", 2, 1),
("T38", 7, 1),
("T39", 1, 1),
("T39", 5, 2),
("T40", 1, 3),
("T40", 4, 4);
```

### 1- Contenu de la table prestation



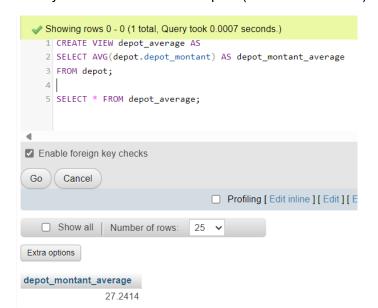
### 2- Contenu de la table usager avec les catégories en toutes lettres



### 3- Liste des numéros et noms des usagers



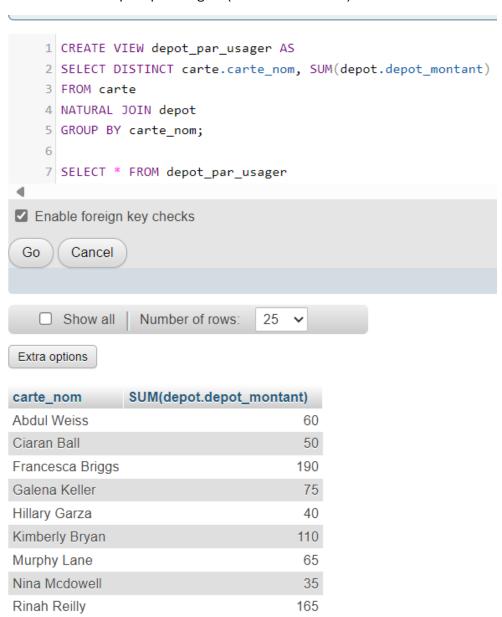
## 4- Moyenne du montant des dépôts (création d'une vue)



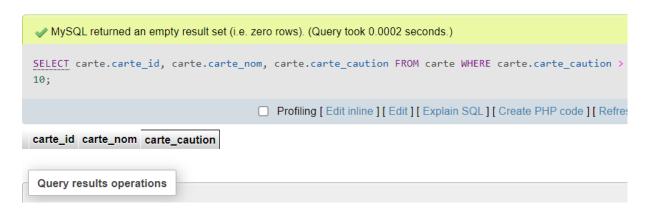
# 5- Montant maximum des dépôts



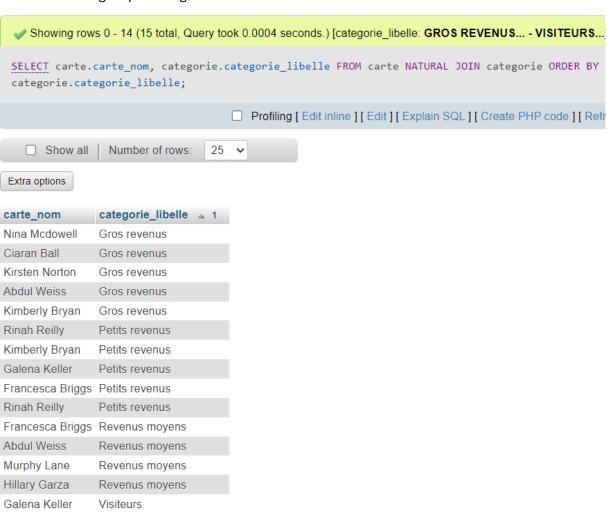
## 6- Montant des dépôts par usagers (création d'une vue)



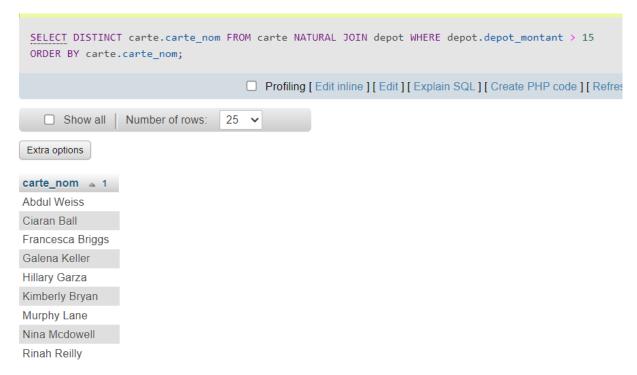
### 7- Liste des usagers ayant payé plus de 10€ de caution



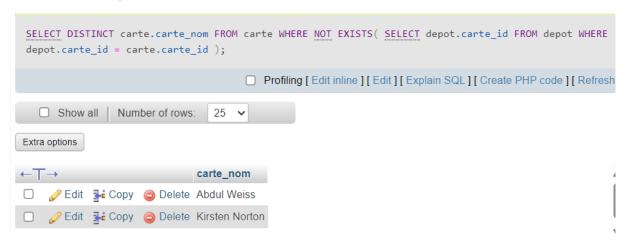
### 8- Liste des usagers par catégories



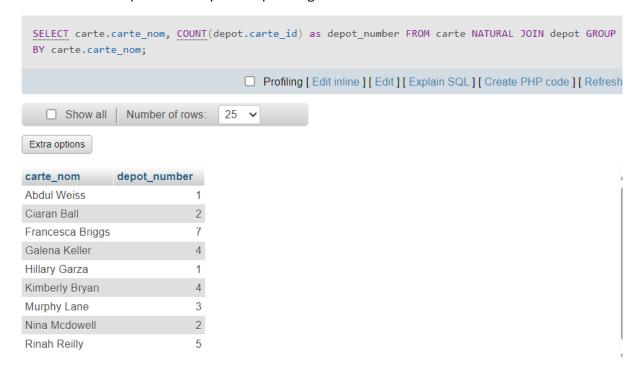
# 9- Liste des usagers ayant déjà effectué au moins un dépôt supérieur à 15€



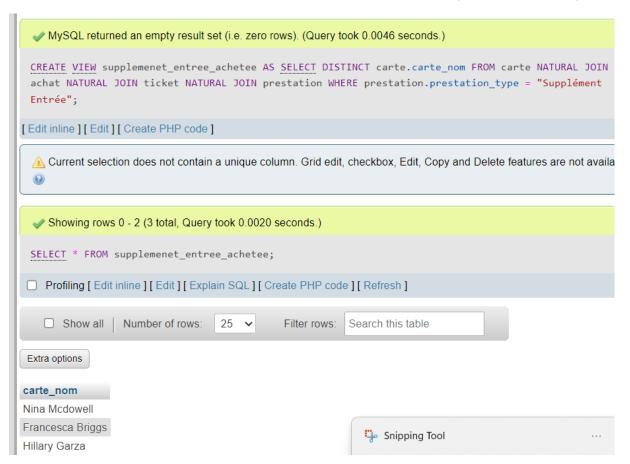
## 10- Liste des usagers n'ayant jamais effectué de dépôt



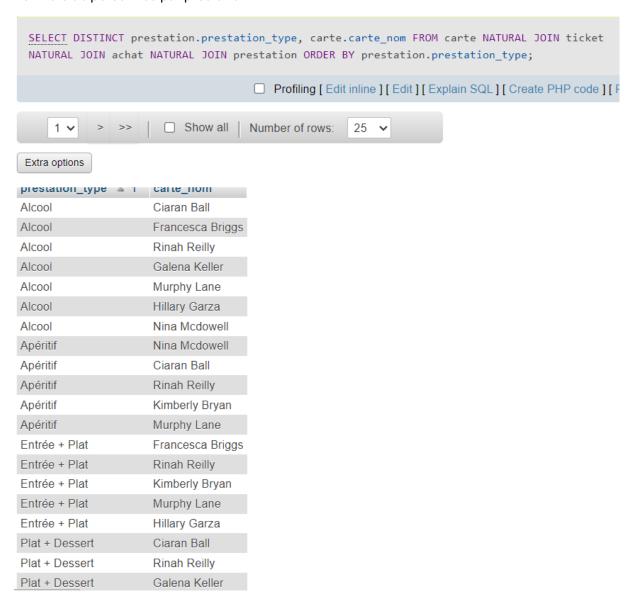
### 11- Nombre de dépôt effectué par chaque usager



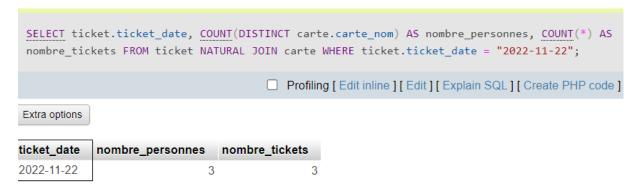
12- Liste des personnes ayant déjà déjà achetés « supplément entrée » (création d'une vue)



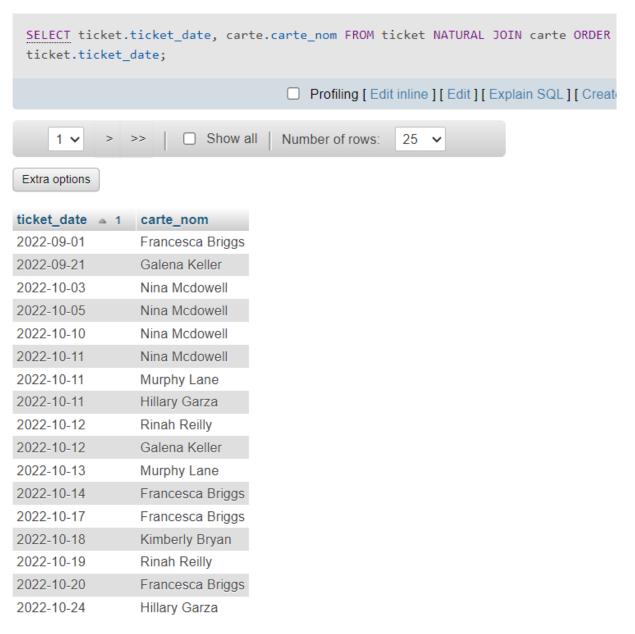
### 13- Liste de personnes par prestation



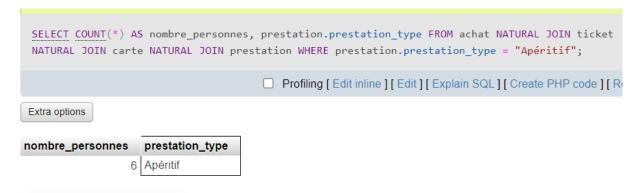
## 14- Nombre de personnes venues au restaurant et nombre de tickets pour le 22/11/2022



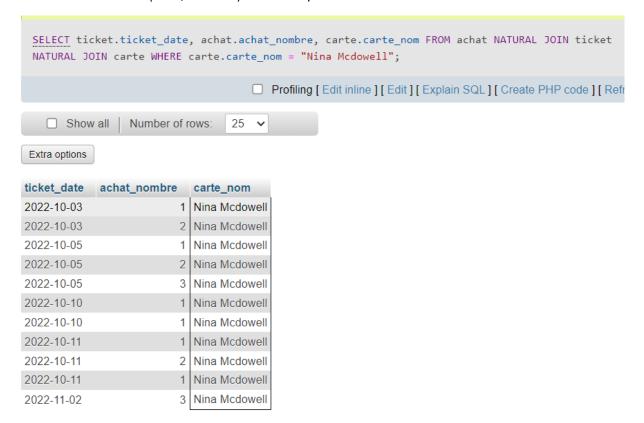
### 15- Nom de personnes par jour (considérer que les jours où il y a eu un achat)



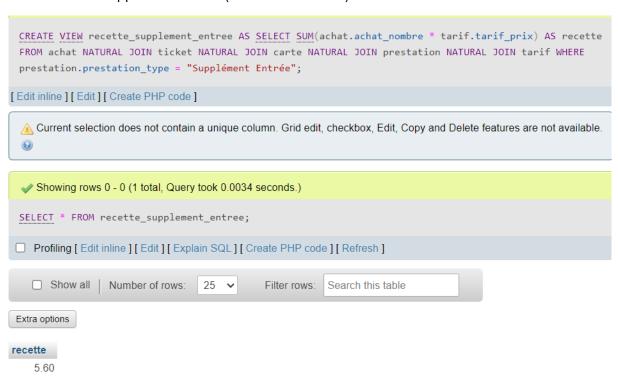
#### 16- Nombre de personnes ayant déjà acheté un apéritif



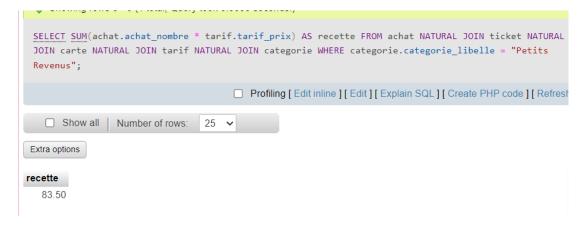
### 17- Liste des achats (date, nombre) effectués par « Nina Mcdowell »



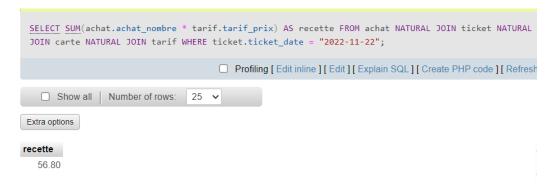
### 18- Recette du supplément entrée (création d'une vue)



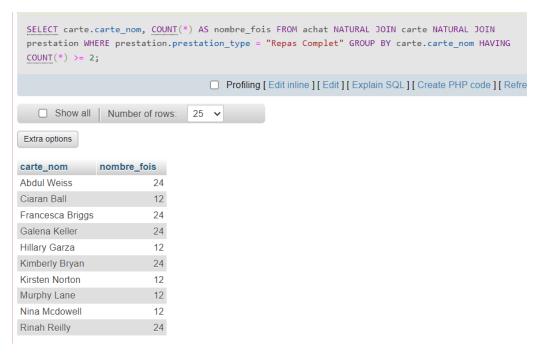
### 19- Recette de la catégorie « petits revenus »



#### 20- Recette des achats effectués le 22/11/2022



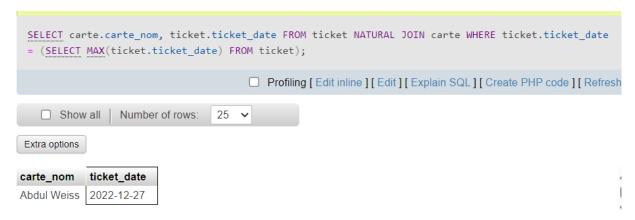
21- Quels usagers ont acheté au moins 2 fois la prestation « repas complet » (2 fois prestation is so not clear enough)



### 22- A quelle date « Nina Mcdowell » est venu au restaurant la dernière fois

<pre>SELECT carte.carte_nom, MAX(ticket.ticket_date) AS last_visit FROM ticket NATURAL JOIN carte WHERE carte.carte_nom = "Nina Mcdowell" ORDER BY ticket.ticket_date;</pre>
☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refres
☐ Show all  Number of rows: 25 ✓
Extra options
carte_nom last_visit
Nina Mcdowell 2022-11-02

23- Qui sont la ou les utilisateurs qui sont venus pour la dernière fois au restaurant



24- Quel pourcentage des usagers ont acheté au moins une fois la prestation « plat principal »

```
SELECT ( SELECT COUNT(DISTINCT carte.carte_nom) FROM achat NATURAL JOIN carte NATURAL JOIN ticket

NATURAL JOIN prestation WHERE prestation.prestation_type = "Plat Principal" ) / ( SELECT

COUNT(DISTINCT carte.carte_nom) FROM carte ) * 100 AS perentage;

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refree

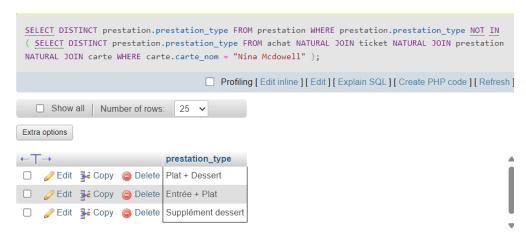
Extra options

perentage

70.0000
```



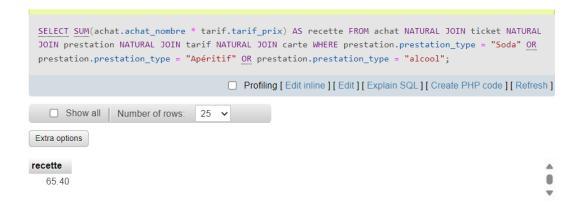
### 26- Liste des prestations jamais achetés par « Nina Mcdowell »



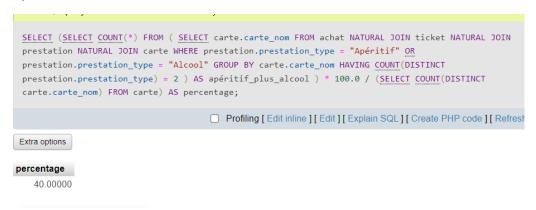
### 27- Liste des prestations achetés par « Abdul Weiss »



### 28- Recette des boissons (soda, apéritif et alcool)



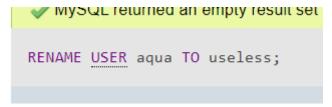
29- Pourcentage des gens ayant déjà acheté au moins une fois la prestation « alcool » + « apéritif »



30- Faire la requête permettant d'insérer un nouvel utilisateur dans la base

CREATE <u>USER</u> aqua;

31- Faire la requête permettant de modifier le nom d'un utilisateur dans la base



32- Faire la requête permettant la suppression de l'utilisateur qu'on avait ajouté

DROP <u>USER</u> useless;