SQL Food App

**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user) (  
user\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)** **PRIMARY** **KEY** **[AUTO\_INCREMENT](https://dev.mysql.com/doc/refman/8.0/en/example-auto-increment.html" \t "http://localhost:8888/_blank)**,  
full\_name **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
email **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
password **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50)  
)

**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user) (full\_name, email, password) **VALUES**   
('UserA', 'usera@gmail.com', 1111),  
('UserB', 'userb@gmail.com', 2222),  
('UserC', 'userc@gmail.com', 3333),  
('UserD', 'userd@gmail.com', 4444),  
('UserE', 'usere@gmail.com', 5555),  
('UserF', 'userf@gmail.com', 6666),  
('UserG', 'userg@gmail.com', 7777),  
('UserH', 'userh@gmail.com', 8888),  
('UserK', 'userk@gmail.com', 9999),  
('UserL', 'userl@gmail.com', 1010)

**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [restaurant](http://localhost:8888/?server=db&username=root&db=Food+App&table=restaurant) (  
res\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)** **PRIMARY** **KEY** **[AUTO\_INCREMENT](https://dev.mysql.com/doc/refman/8.0/en/example-auto-increment.html" \t "http://localhost:8888/_blank)**,  
res\_name **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
image **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
descript **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50)  
)

**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [restaurant](http://localhost:8888/?server=db&username=root&db=Food+App&table=restaurant) (res\_name, image, descript) **VALUES**  
('Res1', 'image\_res\_1', 'descript\_res\_1'),  
('Res2', 'image\_res\_2', 'descript\_res\_2'),  
('Res3', 'image\_res\_3', 'descript\_res\_3'),  
('Res4', 'image\_res\_4', 'descript\_res\_4'),  
('Res5', 'image\_res\_5', 'descript\_res\_5')

**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [food\_type](http://localhost:8888/?server=db&username=root&db=Food+App&table=food_type) (  
type\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)** **PRIMARY** **KEY** **[AUTO\_INCREMENT](https://dev.mysql.com/doc/refman/8.0/en/example-auto-increment.html" \t "http://localhost:8888/_blank)**,  
type\_name **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50)  
)

**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [food\_type](http://localhost:8888/?server=db&username=root&db=Food+App&table=food_type) (type\_name) **VALUES**  
('Type1'),  
('Type2'),  
('Type3'),  
('Type4')

**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [rate\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=rate_res) (  
user\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
res\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
amount **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
date\_rate **[DATETIME](https://dev.mysql.com/doc/refman/8.0/en/date-and-time-type-syntax.html" \t "http://localhost:8888/_blank)**,  
  
**FOREIGN** **KEY** (user\_id) **REFERENCES** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user)(user\_id),  
**FOREIGN** **KEY** (res\_id) **REFERENCES** [restaurant](http://localhost:8888/?server=db&username=root&db=Food+App&table=restaurant)(res\_id)  
)

**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [rate\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=rate_res) (user\_id, res\_id, amount) **VALUES**  
(1, 1, 5),  
(2, 1, 5),  
(3, 1, 5),  
(4, 1, 5),  
(5, 1, 5),  
(1, 2, 5),  
(2, 2, 5),  
(3, 2, 5),  
(4, 2, 5),  
(5, 2, 5)

**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [like\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=like_res) (  
user\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,   
res\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
date\_like **[DATETIME](https://dev.mysql.com/doc/refman/8.0/en/date-and-time-type-syntax.html" \t "http://localhost:8888/_blank)**,  
  
**FOREIGN** **KEY** (user\_id) **REFERENCES** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user)(user\_id),  
**FOREIGN** **KEY** (res\_id) **REFERENCES** [restaurant](http://localhost:8888/?server=db&username=root&db=Food+App&table=restaurant)(res\_id)  
)

**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [like\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=like_res) (user\_id, res\_id) **VALUES**  
(1, 1),  
(1, 1),  
(1, 1),  
(1, 1),  
(1, 1),  
(1, 1),  
(2, 1),  
(2, 1),  
(2, 1),  
(2, 1),  
(3, 1),  
(3, 1),  
(4, 1),  
(4, 1),  
(4, 1),  
(4, 1),  
(4, 1),  
(5, 1),  
(5, 1),  
(5, 1),  
(1, 2),  
(2, 2),  
(3, 2),  
(4, 2),  
(5, 2),  
(5, 2),  
(5, 2),  
(5, 2),  
(5, 2),  
(5, 2),  
(5, 2),  
(5, 2),  
(7, 3),  
(7, 3),  
(7, 3),  
(7, 3),  
(7, 3),  
(7, 3)

**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [food](http://localhost:8888/?server=db&username=root&db=Food+App&table=food) (  
food\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)** **PRIMARY** **KEY** **[AUTO\_INCREMENT](https://dev.mysql.com/doc/refman/8.0/en/example-auto-increment.html" \t "http://localhost:8888/_blank)**,   
food\_name **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
image **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
price **[FLOAT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,   
description **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
type\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
  
**FOREIGN** **KEY** (type\_id) **REFERENCES** [food\_type](http://localhost:8888/?server=db&username=root&db=Food+App&table=food_type)(type\_id)  
)

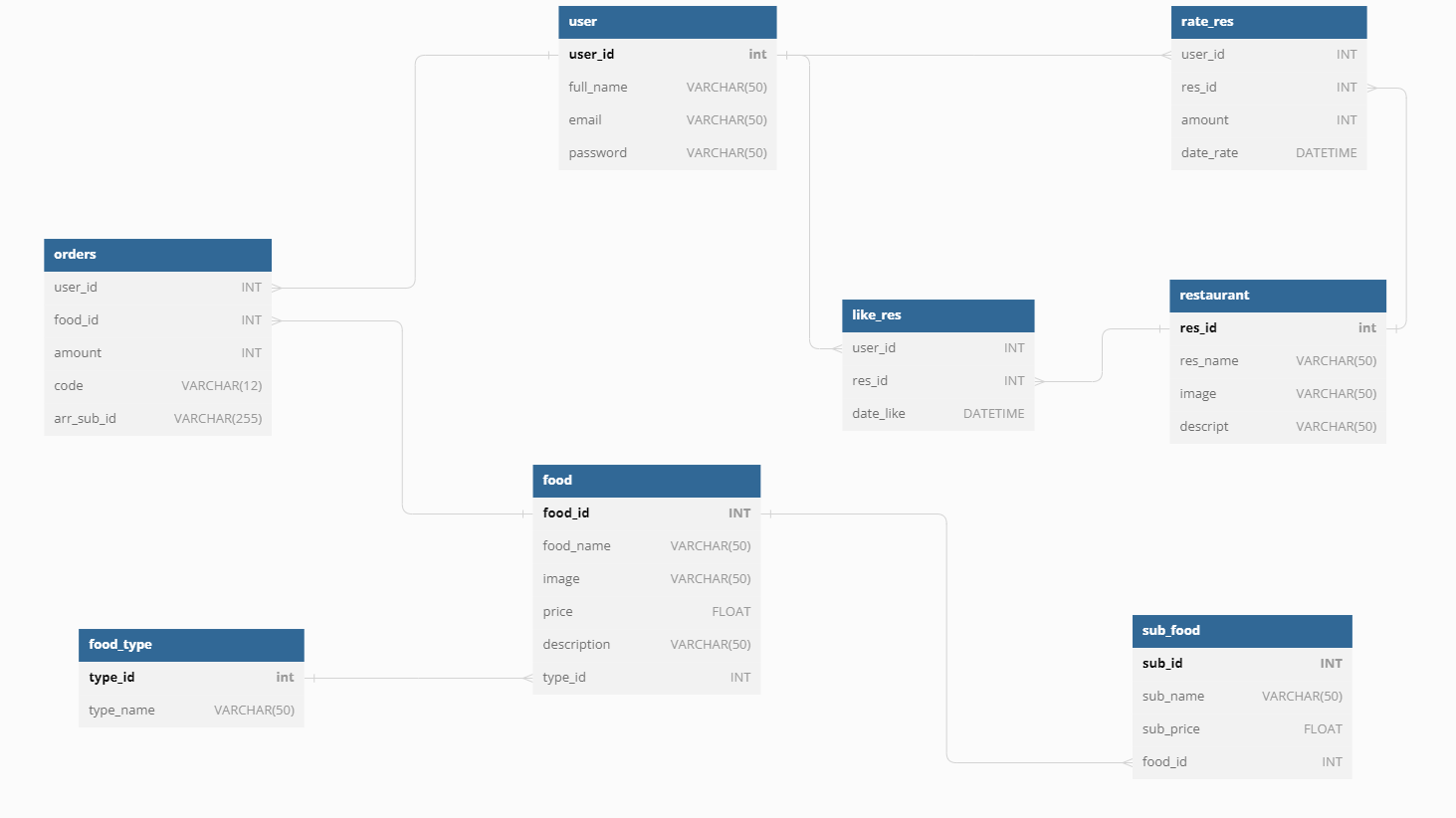
**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [food](http://localhost:8888/?server=db&username=root&db=Food+App&table=food) (food\_name, image, price, description, type\_id) **VALUES**  
('food\_1', 'image\_food\_1', 1000, 'des\_food\_1', 1),  
('food\_2', 'image\_food\_2', 1000, 'des\_food\_2', 2),  
('food\_3', 'image\_food\_3', 1000, 'des\_food\_3', 3),  
('food\_4', 'image\_food\_4', 1000, 'des\_food\_4', 4),  
('food\_5', 'image\_food\_5', 1000, 'des\_food\_5', 1),  
('food\_6', 'image\_food\_6', 1000, 'des\_food\_6', 1),  
('food\_7', 'image\_food\_7', 1000, 'des\_food\_7', 2),  
('food\_8', 'image\_food\_8', 1000, 'des\_food\_8', 2),  
('food\_9', 'image\_food\_9', 1000, 'des\_food\_9', 2),  
('food\_10', 'image\_food\_10', 1000, 'des\_food\_10', 3)

**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [orders](http://localhost:8888/?server=db&username=root&db=Food+App&table=orders) (  
user\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,   
food\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
amount **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
code **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(12),  
arr\_sub\_id **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(255),  
  
**FOREIGN** **KEY** (user\_id) **REFERENCES** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user)(user\_id),  
**FOREIGN** **KEY** (food\_id) **REFERENCES** [food](http://localhost:8888/?server=db&username=root&db=Food+App&table=food)(food\_id)  
)

**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [orders](http://localhost:8888/?server=db&username=root&db=Food+App&table=orders) (user\_id, food\_id) **VALUES**  
(1, 2),  
(1, 3),  
(1, 4),  
(1, 5),  
(2, 6),  
(3, 7),  
(4, 8),  
(5, 9),  
(6, 10),  
(7, 2)

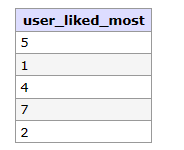
**[CREATE TABLE](https://dev.mysql.com/doc/refman/8.0/en/create-table.html" \t "http://localhost:8888/_blank)** [sub\_food](http://localhost:8888/?server=db&username=root&db=Food+App&table=sub_food) (  
sub\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)** **PRIMARY** **KEY** **[AUTO\_INCREMENT](https://dev.mysql.com/doc/refman/8.0/en/example-auto-increment.html" \t "http://localhost:8888/_blank)**,  
sub\_name **[VARCHAR](https://dev.mysql.com/doc/refman/8.0/en/string-type-syntax.html" \t "http://localhost:8888/_blank)**(50),  
sub\_price **[FLOAT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
food\_id **[INT](https://dev.mysql.com/doc/refman/8.0/en/numeric-type-syntax.html" \t "http://localhost:8888/_blank)**,  
  
**FOREIGN** **KEY** (food\_id) **REFERENCES** [food](http://localhost:8888/?server=db&username=root&db=Food+App&table=food)(food\_id)  
)

**[INSERT](https://dev.mysql.com/doc/refman/8.0/en/insert.html" \t "http://localhost:8888/_blank)** **INTO** [sub\_food](http://localhost:8888/?server=db&username=root&db=Food+App&table=sub_food) (sub\_name, sub\_price, food\_id) **VALUES**  
('sub\_food\_1', 1000, 1),  
('sub\_food\_2', 1000, 2),  
('sub\_food\_3', 1000, 3),  
('sub\_food\_4', 1000, 4),  
('sub\_food\_5', 1000, 5),  
('sub\_food\_6', 1000, 6),  
('sub\_food\_7', 1000, 7),  
('sub\_food\_8', 1000, 8),  
('sub\_food\_9', 1000, 9),  
('sub\_food\_10', 1000, 10)



Tìm 5 người đã like nhà hàng nhiều nhất.

**[SELECT](https://dev.mysql.com/doc/refman/8.0/en/select.html" \t "http://localhost:8888/_blank)** user\_id **AS** user\_liked\_most  
**FROM** [like\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=like_res)  
**GROUP** **BY** user\_id   
**ORDER** **BY** **[COUNT](https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html" \l "function_count" \t "http://localhost:8888/_blank)**(\*) **DESC**  
**LIMIT** 5



Tìm 2 nhà hàng có lượt like nhiều nhất.

**[SELECT](https://dev.mysql.com/doc/refman/8.0/en/select.html" \t "http://localhost:8888/_blank)** res\_id **AS** most\_liked\_res  
**FROM** [like\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=like_res)  
**GROUP** **BY** res\_id   
**ORDER** **BY** **[COUNT](https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html" \l "function_count" \t "http://localhost:8888/_blank)**(\*) **DESC**  
**LIMIT** 2



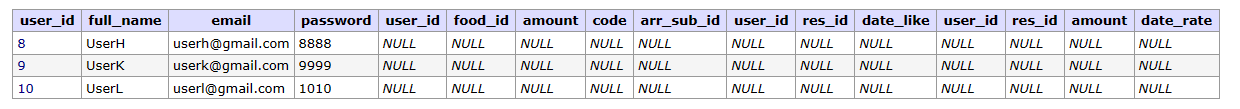
Tìm người đã đặt hàng nhiều nhất.

**[SELECT](https://dev.mysql.com/doc/refman/8.0/en/select.html" \t "http://localhost:8888/_blank)** user\_id **AS** most\_orders\_user  
**FROM** [orders](http://localhost:8888/?server=db&username=root&db=Food+App&table=orders)  
**GROUP** **BY** user\_id   
**ORDER** **BY** **[COUNT](https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html" \l "function_count" \t "http://localhost:8888/_blank)**(\*) **DESC**  
**LIMIT** 1



Tìm người dùng không hoạt động trong hệ thống (không đặt hàng, không like, không đánh giá nhà hàng).

**[SELECT](https://dev.mysql.com/doc/refman/8.0/en/select.html" \t "http://localhost:8888/_blank)** \*   
**FROM** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user)  
**LEFT** **[JOIN](https://dev.mysql.com/doc/refman/8.0/en/join.html" \t "http://localhost:8888/_blank)** [orders](http://localhost:8888/?server=db&username=root&db=Food+App&table=orders)  
**ON** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user).user\_id = [orders](http://localhost:8888/?server=db&username=root&db=Food+App&table=orders).user\_id  
**LEFT** **[JOIN](https://dev.mysql.com/doc/refman/8.0/en/join.html" \t "http://localhost:8888/_blank)** [like\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=like_res)   
**ON** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user).user\_id = [like\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=like_res).user\_id  
**LEFT** **[JOIN](https://dev.mysql.com/doc/refman/8.0/en/join.html" \t "http://localhost:8888/_blank)** [rate\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=rate_res)  
**ON** [user](http://localhost:8888/?server=db&username=root&db=Food+App&table=user).user\_id = [rate\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=rate_res).user\_id  
**WHERE** [orders](http://localhost:8888/?server=db&username=root&db=Food+App&table=orders).user\_id **[IS](https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html" \l "operator_is" \t "http://localhost:8888/_blank)** **NULL** **[AND](https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html" \l "operator_and" \t "http://localhost:8888/_blank)** [like\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=like_res).user\_id **[IS](https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html" \l "operator_is" \t "http://localhost:8888/_blank)** **NULL** **[AND](https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html" \l "operator_and" \t "http://localhost:8888/_blank)** [rate\_res](http://localhost:8888/?server=db&username=root&db=Food+App&table=rate_res).user\_id **[IS](https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html" \l "operator_is" \t "http://localhost:8888/_blank)** **NULL**



Tính trung bình sub\_food của một food.

**[SELECT](https://dev.mysql.com/doc/refman/8.0/en/select.html" \t "http://localhost:8888/_blank)** ( **[SELECT](https://dev.mysql.com/doc/refman/8.0/en/select.html" \t "http://localhost:8888/_blank)** **[COUNT](https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html" \l "function_count" \t "http://localhost:8888/_blank)**(\*) **FROM** [food](http://localhost:8888/?server=db&username=root&db=Food+App&table=food) ) / ( **[SELECT](https://dev.mysql.com/doc/refman/8.0/en/select.html" \t "http://localhost:8888/_blank)** **[COUNT](https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html" \l "function_count" \t "http://localhost:8888/_blank)**(\*) **FROM** [sub\_food](http://localhost:8888/?server=db&username=root&db=Food+App&table=sub_food) )

