CHEF SPECIALTY EXAMPLE

SQL QUERIES

CHIEF SPECIALTY

Suppose you want to keep track of chefs who specialize in different types of dishes as well as their expertise level and the kitchens where they trained.

The relational model consists of the following relations.

Dish (DishName, description, cuisine-type)

Chef (Emp#, name, email, kitchen-where-trained, specialty)

Creates (DishName, Emp#, expertise-level)

QUERY 1

Dish (<u>DishName</u>, description, cuisine-type)

Chef (<u>Emp#</u>, name, email, kitchen-where-trained, specialty)

Creates (<u>DishName</u>, <u>Emp#</u>, expertise-level)

Answer the following query.

Who are the chefs who trained at a kitchen called '5 Points'?

QUERY 1

Dish (DishName, description, cuisine-type)

Chef (Emp#, name, email, kitchen-where-trained, specialty)

Creates (DishName, Emp#, expertise-level)

Answer the following query.

Who are the chefs who trained at a kitchen called '5 Points'?

Answer:

   Select name

   From Chef

   Where kitchen-where-trained = '5 Points';

What kind of query is this?

Notes:
This is a single-table query.
The restriction is found after the Where clause.

QUERY 2

Dish (<u>DishName</u>, description, cuisine-type)

Chef (<u>Emp#</u>, name, email, kitchen-where-trained, specialty)

Creates (<u>DishName</u>, <u>Emp#</u>, expertise-level)

Answer the following query.

List the names of the chefs who cook American food and what is their expertise level in doing so?

QUERY 2

Dish (DishName, description, cuisine-type)

Chef (Emp#, name, email, kitchen-where-trained, specialty)

Creates (DishName, Emp#, expertise-level)

Answer the following query.

List the names of the chefs who cook American food and what is their expertise level in doing so?

Answer:

Select name, expertise-level

From Dish, Chef, Creates

Where Dish.DishName = Creates.DishName

And Chef.Emp# = Creates.Emp#

and cuisine-type = 'American';

What kind of query is this?

This is a multi-table query that involves joins on three relations. Therefore, the From clause specifies three relations.

QUERY 3

Dish (<u>DishName</u>, description, cuisine-type)

Chef (<u>Emp#</u>, name, email, kitchen-where-trained, specialty)

Creates (<u>DishName</u>, <u>Emp#</u>, expertise-level)

Answer the following query.

What are the cuisine types of the dishes for which there are chefs who have an expertise level of "master."

Answer:

    Select distinct cuisine type

    From Dish, Creates

    Where Dish.DishName = Creates.DishName

    And expertise-level = 'master';

Notes:

What kind of query is this? It is a multi-table query involving two relations.

The result will be a list of the cuisine types only. The 'distinct' keyword is used because more than one chef could have a designation of master level for a dish.