# -Schéma de la base de données:

|  |
| --- |
| pizzas |
| **#pizza\_id INTEGER**  **Pizza\_type\_id\* INTEGER**  **Taille Varchar**  **Price float** |

|  |
| --- |
| Pizza\_types |
| **#pizza\_type\_id** INTEGER  **Name** Varchar  **Category** varchar  **Ingredients** varchar |

|  |
| --- |
| Order\_details |
| **#order\_detail\_id** INTEGER  **order\_id\*** INTEGER  **Pizza\_id\*** INTEGER  **Quantity**  INTEGER |

|  |
| --- |
| orders |
| **#order\_id** INTEGER  **Date\_order** Date  **Time\_order** timestamp |

**LES REQUETES:**

# Total des pizzas existantes par catégorie (Chicken)

## Requête :

SELECT category, COUNT(\*) AS total\_pizza\_types

FROM pizza\_types

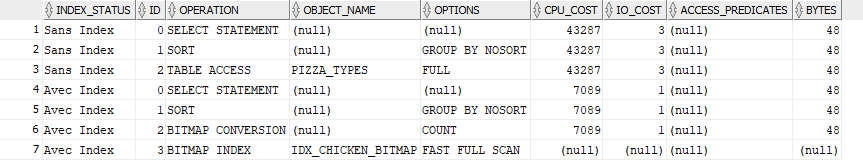
WHERE category = 'Chicken'

GROUP BY category;

## Index : Bitmap

CREATE BITMAP INDEX idx\_chicken\_bitmap ON pizza\_types(category);

## Plans d’exécution :



# Total des ventes d’une catégorie (chicken)

## Requete :

SELECT pt.category,

COUNT( pt.category) AS total\_des\_ventes,

AVG(p.price) AS avg\_price

FROM pizza\_types pt

JOIN pizzas p ON pt.pizza\_type\_id = p.pizza\_type\_id

JOIN order\_details od ON p.pizza\_id = od.pizza\_id

WHERE pt.category = 'Chicken'

GROUP BY pt.category

## Index : Meme

CREATE BITMAP INDEX idx\_chicken\_bitmap ON pizza\_types(category);

## Plans d’exécution :

# Détails d’une commande précise (passage par id\_order)

## Requête :

SELECT o.order\_id,

o.date\_order,

o.time\_order,

od.pizza\_id,

od.quantity,

p.price,

pt.name AS pizza\_name

FROM orders o

JOIN order\_details od ON o.order\_id = od.order\_id

JOIN pizzas p ON od.pizza\_id = p.pizza\_id

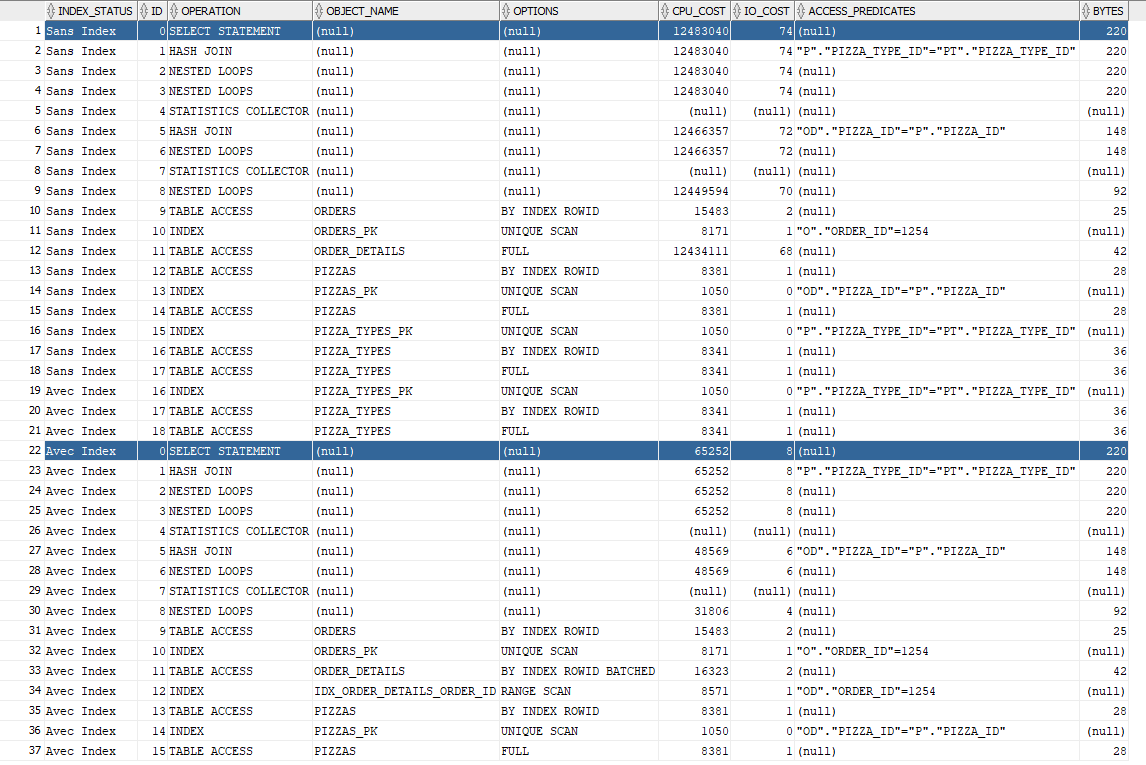
JOIN pizza\_types pt ON p.pizza\_type\_id = pt.pizza\_type\_id

WHERE o.order\_id = 1254

## Index :

CREATE INDEX idx\_order\_details\_order\_id ON order\_details(order\_id);

## Plans d’exécution :



# Les revenues générées par jour

## Requête :

SELECT o.date\_order AS order\_date,

SUM(od.quantity \* p.price) AS total\_revenue

FROM orders o

JOIN order\_details od ON o.order\_id = od.order\_id

JOIN pizzas p ON od.pizza\_id = p.pizza\_id

GROUP BY o.date\_order

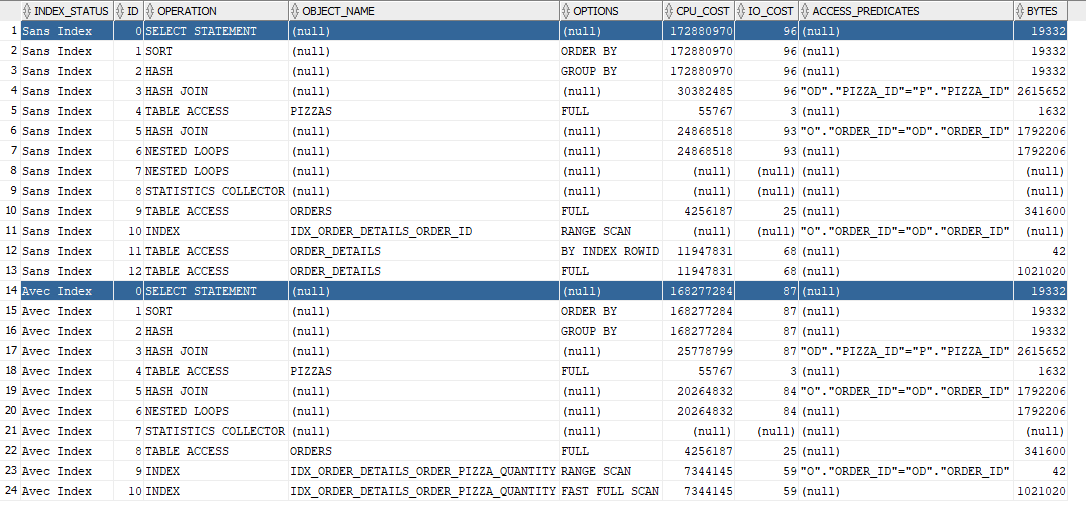
ORDER BY total\_revenue DESC;

## Index :

CREATE INDEX idx\_order\_details\_order\_pizza\_quantity

ON order\_details(order\_id, pizza\_id, quantity);

## Plans d’exécution :



## Amélioration de l’optimisation

## Amélioration :

CREATE INDEX idx\_orders\_order\_date

ON orders(order\_id, date\_order);

## Plans d’exécution :

